

**IN THE UNITED STATES COURT  
FOR THE DISTRICT OF DELAWARE**

LEADER TECHNOLOGIES, INC., a Delaware corporation,	)	
	)	<b>CIVIL ACTION</b>
Plaintiff and Counterdefendant,	)	
	)	<b>No. 1:08-cv-00862-LPS</b>
v.	)	
	)	
FACEBOOK, INC., a Delaware corporation,	)	
	)	
Defendant and Counterclaimant.	)	
	)	

---

**REPLY MEMORANDUM IN SUPPORT OF FACEBOOK, INC.’S  
MOTION FOR SUMMARY JUDGMENT OF INVALIDITY OF  
CLAIMS 1, 4, 7, 21, 23, 25, 31 AND 32 OF U.S. PATENT NO. 7,139,761**

Steven L. Caponi (DE Bar #3484)  
**BLANK ROME LLP**  
1201 N. Market Street, Suite 800  
Wilmington, DE 19801  
302-425-6400  
Fax: 302-425-6464  
*Attorneys for Defendant and  
Counterclaimant Facebook, Inc.*

OF COUNSEL:  
Michael G. Rhodes (*pro hac vice*)  
Heidi L. Keefe (*pro hac vice*)  
Mark R. Weinstein (*pro hac vice*)  
Jeffrey Norberg (*pro hac vice*)  
Elizabeth L. Stameshkin (*pro hac vice*)  
**COOLEY LLP**  
3000 El Camino Real  
5 Palo Alto Square, 4th Floor  
Palo Alto, CA 94306

Dated: September 30, 2010

**TABLE OF CONTENTS**

	Page No.
I. INTRODUCTION .....	1
II. ARGUMENT .....	1
A. Leader’s “Engine” Analogy Supports the Invalidity of the Claims.....	1
B. The Method Step In The System Claims Is Not A “Functional Limitation” .....	2
C. Leader’s Attempt to Treat “Wherein” As “When” Fails – Again .....	3
D. Leader’s Distortion of the Prosecution History Is Without Merit .....	5
E. Leader’s Attempt to Distinguish IPXL Is Unavailing .....	7
F. Leader’s “Evidence” Of Definiteness Raises No Issue of Material Fact.....	8
G. Leader’s “Waiver” Arguments Are Without Merit .....	9
III. CONCLUSION.....	10

**TABLE OF AUTHORITIES**

Page No.

**CASES**

*Ariba, Inc. v. Emptoris, Inc.*,  
Civ. A. No. 9:07-CV-90, 2008 WL 3482521 (E.D. Tex. Aug. 7, 2008) .....5

*Ex parte Lyell*,  
17 U.S.P.Q.2d 1548, 1550 (1990).....7

*Harrah’s Entm’t, Inc. v. Station Casinos, Inc.*,  
321 F. Supp. 2d 1173 (D. Nev. 2004).....10

*Helmsderfer v. Bobrick Washroom Equip., Inc.*,  
527 F.3d 1379 (Fed. Cir. 2008).....4, 5

*HTC Corp. v. IPCom GMBH & Co., KG*,  
Civ. A. No. 08-1897 (RMC), \_\_\_ F. Supp. 2d \_\_\_, 2010 WL 3338536 (D.D.C. Aug.  
25, 2010) .....8

*IPXL Holdings, L.L.C. v. Amazon.com, Inc.*,  
430 F.3d 1377 (Fed. Cir. 2005)..... *passim*

*Microprocessor Enhancement Corp. v. Texas Instruments Inc.*,  
520 F.3d 1367 (Fed. Cir. 2008).....2, 3

*Rembrandt Data Techs., LP v. AOL, LLC*,  
673 F. Supp. 2d 420 (E.D. Va. 2009) .....5, 6, 8

*Ricoh Co. v. Katun Corp.*,  
486 F. Supp. 2d 395 (D.N.J. 2007) .....2

*Sitrick v. Dreamworks, LLC*,  
516 F.3d 993 (Fed. Cir. 2008).....9

**STATUTES**

35 U.S.C. § 112.....7

Fed. R. Civ. P. 26(a)(2).....9

Fed. R. Civ. P. 56.....9

## I. INTRODUCTION

Facebook's motion presents the purely legal question of whether claims 1, 21 and 23 of the '761 patent (hereafter "the system claims")<sup>1</sup> improperly claim both a system and a method step involving its use, rendering them invalid under *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377 (Fed. Cir. 2005) ("*IPXL*"). There is no genuine issue of material fact that could preclude summary judgment because the only "fact" material to this motion is the undisputed language of these claims, all of which recite a system and a method step in which the user "accesses" or "employs" the data in a second context or user workspace. Because these claims cover both a system and a method step involving its use, they are impermissible hybrid claims.

## II. ARGUMENT

### A. Leader's "Engine" Analogy Supports the Invalidity of the Claims

Leader's primary argument is that the method step in the system claims is merely "a functional limitation" that describes a "capability" of the claimed system. Leader attempts to support this argument by comparing the system claims to an imaginary claim directed to "an engine that starts when a user turns a key." D.I. 652 at 2. "It does not matter," Leader claims, "whether a user actually turns the key, infringement is found as long as the engine is designed in such a way that it starts when a key is turned." *Id.* This analogy fails under scrutiny. The asserted system claims plainly and affirmatively recite an act the user performs – not merely how the claimed system would respond "when" that step is performed. Using Leader's engine example, a hypothetical claim that provides a closer analogy for the system claims would read: "an engine, wherein the user turns a key to start the engine." Such a claim would fail under *IPXL* because it improperly claims both an apparatus (an engine) and the affirmative step in

---

<sup>1</sup> Claims 1 and 23 of the '761 patent are apparatus claims that cover a system "that facilitates management of data." Claim 21 covers a computer-readable medium for storing executable instructions for a method of managing data. Because the legal indefiniteness issues as to claims 1, 21 and 23 are identical, for ease of reference and consistency, references to "the system claims" in this reply brief are intended to refer collectively to claims 1, 21 and 23.

which the user turns a key to start it. The system claims of the '761 patent are, in this respect, no different because they cover both (1) a system for facilitating management of data and (2) the use of that system through the user-performed act of accessing or employing the data from the second context or user workspace. The Court should therefore declare the asserted system claims, and all asserted claims that depend from them, indefinite and therefore invalid.

**B. The Method Step In The System Claims Is Not A “Functional Limitation”**

Leader describes a functional limitation as “an attempt to define something by what it does rather than by what it is,” D.I. 652 at 10 (quoting *Ricoh Co. v. Katun Corp.*, 486 F. Supp. 2d 395, 402 (D.N.J. 2007)), but the method step in the system claims is not a functional limitation under this definition. The method step neither defines what the claimed system “is” nor “what it does.” It instead describes the performance of an actual step in which “the user accesses” or “the user employs” data from the second context or user workspace.

The cases cited in Leader’s opposition all involve claim language that recites a capability or function of a claimed apparatus. The rationale behind these cases is that a limitation merely stating a capability or function does not require any step to be actually performed, and therefore, does not run afoul of *IPXL*. See, e.g., *Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008). This reasoning might have been relevant if the asserted claims were drafted to recite a system “wherein the user *can* access the data from the second context,” but they were not. These system claims plainly require a separate act in which the user “accesses” or “employs” data. The use of active, present tense verbs clearly identifies an action that the user performs, not an action to which the system is capable of responding.

Leader’s contention that the method step is “a functional limitation” is also inconsistent with the prosecution history. Claim 21 recites a computer-readable medium with instructions for “dynamically associating the data and the application . . . such that the user employs the application and data.” That claim limitation originally said, “such that the user can employ the

application and data,” but Leader struck “can employ” during prosecution and replaced it with “employs,” explaining that its amendments were made “to more clearly recite the invention.” Declaration of Mark R. Weinstein (“Weinstein Decl.”) Ex. A at 9 (showing amendments to claim 40, issuing as claim 21); *id.* at 12. This amendment not only demonstrates that Leader knew how to draft a functional claim limitation, but chose to abandon it in favor of claim language requiring actual action by the user.<sup>2</sup>

Claim 22 (which Leader did not assert) provides further evidence that the lack of functional language in the system claims was a deliberate choice by Leader. Claim 22 recites “a system that facilitates management of data” with means-plus-function elements that mirror the functions in claims 1, 21 and 23. But claim 22 concludes with the step of updating the metadata “such that the user can employ the application and data from the second user workspace,” which stands in contrast to the asserted system claims that say that “the user accesses” or “the user employs” the data or the application. These differences confirm that had Leader intended to merely claim a system for giving the user the *capability* to access or employ the data from a second context or workspace, it certainly knew how to do so.

### C. Leader’s Attempt to Treat “Wherein” As “When” Fails – Again

Leader’s contention that the method step in the system claims is merely functional rests on the now-familiar argument that it abandoned at trial – that the word “wherein” means “when.” In at least ten places in its opposition brief discussing the language of the system claims, Leader conspicuously substitutes “wherein” with “when.” *See, e.g.*, D.I. 652 at 2 (“An infringing tracking component is one that is built with this functionality, *i.e.*, the ability to dynamically

---

<sup>2</sup> Another example also appears in claim 21 within the claim element immediately following the “user employs” method step. That element, “indexing the data created in the user workspace such that a plurality of different users can access the data via the metadata,” was added in the very same amendment in which Leader changed “the user can employ” to “the user employs.” Weinstein Decl. Ex. A at 9. The addition of functional language to claim 21, immediately after an explicit method step, provides further evidence that the method step is not a “functional limitation” as Leader contends.

update metadata when a user accesses data from a second context.”)<sup>3</sup> Leader does not articulate any rationale for these repeated substitutions, nor can it.

“Wherein” does not mean “when.” The Court construed “wherein” to mean “in which.” D.I. 601, Jury Instruction 3.4, at 24. As the Court will recall, Facebook urged the Court to construe “wherein” because Leader had improperly argued throughout trial that “wherein” meant “when.” D.I. 596 at 4-6; *see also* Weinstein Decl. Ex. B at 1613:24-1618:12. Facebook argued that “wherein” should be construed as “in which,” and should specifically exclude “when” to preclude Leader from continuing to make that improper argument. *Id.* The Court specifically asked Leader: “is it enough for me to construe wherein as in which and not go the extra mile and say not when?” *Id.* at 1634:22-1635:2. Leader’s counsel represented to the Court that such a clarification was unnecessary, and reassured the Court that: “**I’m not going to argue when.** I’m arguing which. That’s been our position throughout this entire case. It is in which.” *Id.* at 1635:24-1636:3 (emphasis added). Despite this unequivocal representation, Leader is again arguing that “wherein” means “when.” Leader’s attempt to rewrite its claims to say something they do not should be rejected – again. *See Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527

---

<sup>3</sup> *See also* Leader’s Opposition, D.I. 652 at 2 (“[T]he tracking component of the ‘761 Patent is one that dynamically updates metadata when a user accesses data from a second context.”); *id.* at 3 (“The tracking component tracks a user as they move between contexts and dynamically updates the metadata when a user accesses data from a different context.”); *id.* at 9 (“In other words, the tracking component of Claim 1 has the capability of updating the metadata when a user accesses data from a second context with information about the second context.”); *id.* (claim 23 “requires the capability of storing change information as part of the metadata when a user accesses data from another workspace.”); *id.* at 13 (“Instead, as written, these claims provide functional language that describe two particular types of tracking components, one that dynamically updates metadata when a user accesses data from a second context and the other which dynamically stores change information when a user accesses data from a second user workspace.”); *id.* (“Claim 21 describes a computer program that dynamically associates data when a user employs data from a second workspace.”); *id.* at 15 (“the claims of the ‘761 Patent describe ‘the capability of the [tracking component],’ i.e., the ability to dynamically update metadata when a user accesses data from a second context.”); *id.* at 19 (“Facebook makes a system that contains a context component that captures context information and stores the context information in metadata and a tracking component that tracks users and dynamically updates the metadata when a user accesses data from a second context.”) (emphasis added).

F.3d 1379, 1383 (Fed. Cir. 2008) (“Courts cannot rewrite claim language.”); *Rembrandt Data Techs., LP v. AOL, LLC*, 673 F. Supp. 2d 420, 426 (E.D. Va. 2009) (“Courts must construe the claim as written, not as the patentees wish they had written it.”) (quotations omitted).

But even if Leader were entitled to ignore the plain language of the system claims and the Court’s claim construction ruling, the intrinsic evidence plainly demonstrates that “wherein” and “when” have different meanings. Claim 24, for example, depends from claim 23 and reads: “The system of claim 23, **wherein** the tracking component automatically creates the metadata **when** the user accesses the first user workspace.” This claim plainly uses “wherein” as “in which,” a grammatical connector between the preamble of claim 24 and the additional limitation that follows. The claim continues by using the phrase, “when the user accesses,” which is the exact meaning Leader attributes – incorrectly – to the “wherein” clause in claim 23. This claim language unambiguously demonstrates that Leader knew the differences between “wherein” and “when,” and intentionally used them separately to convey different meanings.

The fact that the “wherein” clause adds a method step and is not merely functional language is supported by the fact that the claim in *IPXL* was found invalid despite the fact that the offending language was part of a wherein clause. 430 F.3d at 1384 (“The system . . . wherein . . . the user uses the input means . . .”); *see also* D.I. 384, Ex. A, ’761 patent, claim 1 (“A computer-implemented system . . . wherein the user accesses the data . . .”). In each case, a “wherein” clause in a system claim requires the user to perform an affirmative act, resulting in a mixture of statutory classes that fails under *IPXL*. *See Ariba, Inc. v. Emptoris, Inc.*, Civ. A. No. 9:07-CV-90, 2008 WL 3482521, at \*7-8 (E.D. Tex. Aug. 7, 2008) (providing another example of a system claim invalidated under *IPXL* where the offending method step was in a “wherein” clause).

#### **D. Leader’s Distortion of the Prosecution History Is Without Merit**

Leader also argues that Facebook’s motion should be denied because “it was the



Examiner who wrote the disputed claim language,” D.I. 652 at 8, but this contention is irrelevant and factually incorrect. As explained above, the method step in claim 21 (“the user employs the application and data”) was drafted solely by Leader in an amendment to its claims many months *before* the Examiner’s Amendment. The Examiner’s Amendment adopted this preexisting language when it added a substantially similar limitation to claims 1 and 23. There is no evidence to support Leader’s speculation that the method step in claims 1 and 23 was drafted or even suggested by the Examiner.

The amendments that resulted in the “wherein” clauses in claims 1 and 23 were discussed during an interview between Leader’s representative and the Examiner that took place two weeks before the Notice of Allowability. *See* Weinstein Decl. Ex. C (“Applicant and Examiner discussed amending [the pending claims] to overcome the prior art by an Examiner’s Amendment (attached)”). This interview came after “multiple interviews” between Leader and the patent examiner earlier in 2006, and the prosecution history contains no record of the substance of those interviews. *See id.* Ex. D at 10 (thanking patent examiner for the “courtesies extended during multiple interviews regarding prosecution of the subject application.”). There is nothing in the prosecution record to indicate who originally suggested the method step in claims 1 and 23 – but considering that claim 21 *already* included substantially the same method step, the more plausible explanation is that existing language was simply adapted to make claims 1 and 23 consistent with claim 21.

In any event, Leader’s attempt to shift the blame to the Examiner for the offending claim language is legally irrelevant. Leader does not claim that the Examiner’s Amendment or anything in the prosecution history relating to it sheds light on the meaning of the method step in the system claims. The only relevant question here is whether the asserted system claims include a method step, not how that step came into existence. *See Rembrandt*, 673 F. Supp. 2d at 426-27 (invalidating apparatus claim under *IPXL* notwithstanding that all parties agreed that the method

step was the result of a drafting error).

Finally, Leader's suggestion that the asserted system claims are not invalid because the patent examiner allowed them is similarly unavailing. *See* D.I. 652 at 7-8. The same can be said of any claim that is challenged on the grounds of indefiniteness in court – every claim found indefinite by a district court was necessarily a claim previously allowed by a patent examiner. The apparatus claim invalidated in *IPXL*, for example, was obviously found patentable by an examiner, as it resulted in the infringement suit that produced the Federal Circuit's opinion. In the present case, the fact that the patent examiner allowed the system claims has no bearing on whether those claims are indefinite under 35 U.S.C. § 112 ¶ 2 and *IPXL*. There is no evidence that the examiner ever considered the indefiniteness issue presented in this motion.

**E. Leader's Attempt to Distinguish *IPXL* Is Unavailing**

Leader next argues that *IPXL* is distinguishable because its holding “is limited to a user using components of a system.” D.I. 652 at 14. Leader reasons that the asserted system claims do not implicate *IPXL* because they do not use the words, “the user uses the network-based system” or “the user uses the computer-implemented system.” D.I. 652 at 13. Leader's attempt to limit or distinguish *IPXL* fails for two reasons.

First, the *IPXL* decision establishes the broader proposition that a single claim reciting “the combination of two separate statutory classes of invention,” *e.g.*, an apparatus claim that includes a method step, is invalid. 430 F.3d at 1384 (citing *Ex parte Lyell*, 17 U.S.P.Q.2d 1548, 1550 (1990)). Any claim that results in such a combination is invalid no matter the specific language the patentee used to express it. A system claim containing a method step is invalid under *IPXL* regardless of whether the offending method step recites what Leader calls “a user using components of a system” D.I. 652 at 14, or a user using the system as a whole. In fact, *IPXL* does not even require that the method step involve user action at all – a method step performed by the system itself, requiring no user involvement, invalidates a system claim. *See*,

*e.g.*, *Rembrandt*, 673 F. Supp. 2d at 426-27 (invalidating apparatus claim under *IPXL Holdings* because of method step performed by the claimed data transmitting device); *HTC Corp. v. ICom GMBH & Co., KG*, Civ. A. No. 08-1897 (RMC), \_\_\_ F. Supp. 2d \_\_\_, 2010 WL 3338536, at \*25-26 (D.D.C. Aug. 25, 2010) (invalidating claim under *IPXL Holdings* because “[t]he claim describes the apparatus as actually performing the method steps; it does not merely define the apparatus as a structure has certain means enabling it to perform certain steps.”). There is no support for Leader’s contention that *IPXL* is “limited to a user using components of a system,” or for Leader’s attempt to limit it to claims employing certain magic words.

Second, even if Leader’s restrictive interpretation had merit, *IPXL* would still apply to the asserted system claims. This is because the “user” recited in those claims is obviously a user of the claimed system that “facilitates the management of data.” When a system *user* “accesses” or “employs” the data from the system’s second context or user workspace, that user is unquestionably using the claimed system in performing that act.

#### **F. Leader’s “Evidence” Of Definiteness Raises No Issue of Material Fact**

Leader also argues that claims 1, 21 and 23 are not indefinite because these claims, according to Leader, can be understood by those of skill in the art. Leader points to the fact that Facebook’s invalidity expert, Dr. Saul Greenberg, “was able to prepare an invalidity expert report applying several pieces of prior art to the claims.” D.I. 652 at 11. This argument misses the point. The asserted system claims are indefinite because there is a fundamental flaw in the structure of the claims and irreconcilable confusion as to what they cover – not because individual words or phrases are unclear in isolation. Because these claims merge apparatus components and method steps, a competitor cannot determine if those claims are infringed by the mere manufacture, use or sale of the claimed system, or only if a user actually accesses or employs the data from the second context or user workspace. No expert offered an opinion on this issue during expert discovery, nor would such an opinion have served any purpose – the

applicability of *IPXL* presents a purely legal question of claim interpretation for which expert testimony would not be helpful. And that legal question is entirely separate from (and irrelevant to) the prior art invalidity issues that Dr. Greenberg and Leader's invalidity expert testified about at trial because it has no bearing on whether the claim elements can be mapped to the prior art.<sup>4</sup>

Leader's related complaint that Facebook's motion does not provide sufficient evidence or argument on indefiniteness likewise fails. Leader does not suggest what additional evidence or argument Facebook could have presented, nor could it. For example, the motion for summary judgment filed by Amazon.com in the *IPXL* case that resulted in the Federal Circuit's opinion devoted only two pages to the indefiniteness issue and relied on nothing beyond the language of the claim. *See* Weinstein Decl. Ex. E at 37-38. That motion was sufficient to result in the grant of summary judgment by the district court, affirmed by the Federal Circuit, so there is no basis for Leader to claim that Facebook has not met its burden under Fed. R. Civ. P. 56 through the more extensive motion filed with this Court.

#### **G. Leader's "Waiver" Arguments Are Without Merit**

Finally, Leader argues that Facebook "waived" its indefiniteness arguments by offering proposed constructions for terms in the '761 patent. Leader complains that because Facebook

---

<sup>4</sup> Leader filed a declaration from its invalidity expert, Dr. Herbsleb, containing previously-undisclosed opinions relating to indefiniteness. *See* D.I. 653, ¶¶ 3-6. Dr. Herbsleb never provided an opinion on indefiniteness in his expert report. *See* Weinstein Decl. Ex. F. His new declaration should therefore be stricken as a violation of the Court's scheduling order and the expert disclosure requirements of Fed. R. Civ. P. 26(a)(2). Even if considered, however, Dr. Herbsleb's declaration would raise no genuine issue of material fact for two reasons. First, the indefiniteness question presented by this motion is a pure question of claim construction, *i.e.*, whether the system claims require the performance of a method step. Nothing in Dr. Herbsleb's declaration can change the claim language. Second, Dr. Herbsleb's declaration does not address whether the system claims include a method step. The declaration merely includes the naked conclusion that Dr. Herbsleb was "able to determine that a person of ordinary skill in the art would be able to understand the scope and bounds of the claims of the '761 Patent." D.I. 653, ¶ 3. This conclusory assertion raises no genuine issue of material fact to prevent summary judgment. *See Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 1001 (Fed. Cir. 2008) ("Conclusory expert assertions cannot raise triable issues of material fact on summary judgment.").

offered constructions for “wherein” and the phrases “accesses the data” and “employs the application and data,” Facebook “cannot now argue the terms are insolubly ambiguous and incapable of being understood by one of skill in the art.” D.I. 652 at 19. Leader’s position is without legal basis. *See, e.g., Harrah’s Entm’t, Inc. v. Station Casinos, Inc.*, 321 F. Supp. 2d 1173, 1176 (D. Nev. 2004) (defendant’s submission of proposed construction for claim terms did not waive argument that those terms were indefinite).

Leader’s waiver arguments fundamentally misunderstand the nature of the indefiniteness issue in this motion. Facebook is **not** arguing that individual terms or phrases in the method steps are “insolubly ambiguous” when viewed in isolation. Rather, as the Federal Circuit made clear in *IPXL*, the fatal lack of clarity in claims of this kind is created by their impermissible mixing of system and method limitations, which renders them indefinite. 403 F.3d at 1384. The fact that Facebook offered constructions for some of those terms and phrases has nothing to do with whether they render the system claims “hybrid” claims invalid under *IPXL*.

### III. CONCLUSION

For the reasons stated above, Facebook respectfully requests that the Court grant summary judgment of invalidity as to claims 1, 4, 7, 21, 23, 25, 31 and 32 of the ’761 patent.

Dated: September 30, 2010

By: /s/ Steven L. Caponi

OF COUNSEL:

Michael G. Rhodes (*pro hac vice*)  
 Heidi L. Keefe (*pro hac vice*)  
 Mark R. Weinstein (*pro hac vice*)  
 Jeffrey Norberg (*pro hac vice*)  
 Elizabeth L. Stameshkin (*pro hac vice*)

**COOLEY LLP**

3000 El Camino Real  
 5 Palo Alto Square, 4th Floor  
 Palo Alto, CA 94306

Steven L. Caponi (DE Bar #3484)  
**BLANK ROME LLP**  
 1201 N. Market Street, Suite 800  
 Wilmington, DE 19801  
 302-425-6400  
 Fax: 302-425-6464  
 Attorneys for Defendant-Counterclaimant  
 Facebook, Inc.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

LEADER TECHNOLOGIES, INC., a  
Delaware corporation,

Plaintiff-Counterdefendant,

v.

FACEBOOK, INC., a Delaware corporation,

Defendant-Counterclaimant.

Civil Action No. 08-862-JJF/LPS

**DECLARATION OF MARK R. WEINSTEIN IN SUPPORT OF REPLY  
MEMORANDUM IN SUPPORT OF FACEBOOK, INC.'S  
MOTION FOR SUMMARY JUDGMENT OF INVALIDITY OF  
CLAIMS 1, 4, 7, 21, 23, 25, 31 AND 32 OF U.S. PATENT NO. 7,139,761**

I, Mark R. Weinstein, declare:

1. I am an attorney with Cooley LLP, of counsel in this action for defendant Facebook, Inc. ("Facebook"). I make this declaration in support of the Reply Memorandum in Support of Facebook, Inc.'s Motion for Summary Judgment of Invalidity of Claims 1, 4, 7, 21, 23, 25, 31 and 32 of U.S. Patent No. 7,139,761.

2. Attached hereto as **Exhibit A** is a true and correct copy of a document entitled "Reply to Office Action Dated June 3, 2005," which states on its face that it was filed with the U.S. Patent and Trademark Office ("PTO") on November 3, 2005.

3. Attached hereto as **Exhibit B** is a true and correct copy of excerpts of the transcript of proceedings before this Court on July 23, 2010.

4. Attached hereto as **Exhibit C** is a true and correct copy of a document entitled "Interview Summary" reflecting the summary of an interview of August 15, 2006, filed with the PTO on August 30, 2006.

5. Attached hereto as **Exhibit D** is a true and correct copy of the June 21, 2006 “Supplemental Reply to a Reply to the Final Office Action Dated January 5, 2006 That Accompanied the RCE,” which was filed with the PTO on June 21, 2006.

6. Attached hereto as **Exhibit E** is a true and correct copy of the “Memorandum in Support of Defendant Amazon.com, Inc.’s Motion for Summary Judgment of NonInfringement and Invalidity,” filed on June 23, 2004 in *IPXL Holdings, LLC v. Amazon.com, Inc.*, Case No. CV-04-70 (LMB), United States District Court for the Eastern District of Virginia.

7. Attached hereto as **Exhibit F** is are true and correct copies of the Disclosure of Expert Testimony for James Herbsleb, Ph.D. pursuant to Fed. R. Civ. P. 26(a)(2), dated April 8, 2010, and Disclosure of Expert Testimony for James Herbsleb, Ph.D. pursuant to Fed. R. Civ. P. 26(a)(2), dated April 22, 2010, which was served by Leader in this action.

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 30, 2010 in Palo Alto, California.



---

Mark R. Weinstein

# **EXHIBIT A**



11-04-05

Handwritten signature/initials

PATENT

LEADP102USA



CERTIFICATE OF MAILING

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited in the United States Postal Service on the date shown below in an envelope as "Express Mail Post Office to Addressee" having mailing label number ED311647709US addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date: 11/03/05

Eric D. Jorgenson (Signature)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Applicant(s): Michael McKibben, et al.

Examiner: Diane Mizrahi

Serial No: 10/732,744

Art Unit: 2165

Filing Date: December 10, 2003

Title: DYNAMIC ASSOCIATION OF ELECTRONICALLY STORED INFORMATION WITH ITERATIVE WORKFLOW CHANGES

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

REPLY TO OFFICE ACTION DATED JUNE 3, 2005

Dear Sir:

Favorable reconsideration of the above-identified patent application is respectfully requested in view of the amendments and comments below. A Credit Card Payment Form in the amount of \$225 for a small entity extension fee of two months accompanies this Reply.

11/07/2005 CNGUYEN 00000085 10732744

01 FC:2252

225.00 OP

AMENDMENTS TO THE SPECIFICATION

- (1) Please change the CROSS-REFERENCE TO RELATED APPLICATIONS statement according to following amendments:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of ~~priority under 35 U.S.C. § 119(e) from~~ U.S. Provisional Patent application Serial No. 60/432,255 entitled "METHOD FOR DYNAMIC ASSOCIATION OF ELECTRONICALLY STORED INFORMATION WITH ITERATIVE WORKFLOW CHANGES", filed December 11, 2002; and is related to co-pending U.S. Patent Application Serial Ser. No. [[\_\_\_\_\_]] (~~Atty Dkt. No. LEADP101USA~~) 10/731,906 entitled "CONTEXT INSTANTIATED APPLICATION PROTOCOL" filed on December 10, 2003.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer-implemented system that facilitates the management of data, comprising a unified computer-implemented horizontal data management tool for at least many-to-many user functionality, the tool facilitating data communications, data organization, data processing, and data storage, the data management tool facilitates collaboration among a plurality of users across a plurality of projects, and dynamically assigns at least one communications tool to at least one of the plurality of projects.

2. (Original) The system of claim 1, the data management system structures data according to a user who generated the data.

3. (Currently Amended) The system of claim 1, the data management system structures data according to a [[the]] context in which the data is [[was]] generated.

4. (Currently Amended) The system of claim 1, the data management tool provides links to enterprise leadership priorities.

5. (Currently Amended) The system of claim 1, the data management tool performs communications tasks concurrently ~~substantially simultaneously~~ with reminding a user of associated work priorities.

6. (Currently Amended) The system of claim 1, the data management tool automatically stores contextual information relating to an item of communication and utilizes the [[that]] contextual information in performance of communication tasks.

7. (Currently Amended) The system of claim 1, the data management tool integrates three [[two]] or more different applications into a common application environment, the different applications comprising telephony, unified messaging, decision support, document management, portals, chat, collaboration, search, vote, relationship management, calendar, personal information management, profiling, directory management, executive information systems, dashboards, cockpits, tasking, meeting and, web and video conferencing.

8. (Currently Amended) The system of claim 1, the data management tool provides a structure that defines relationships between and among complex collections of data.

9. (Currently Amended) The system of claim 1, the data management tool automates workflow between and among multiple entities.

10. (Currently Amended) The system of claim 1, the data management tool facilitates data storage using at least one of relational and object storage methodologies.

11. (Canceled)

12. (Currently Amended) The system of claim 1, the at least one communications tool includes one or more of e-mail, voicemail, fax, teleconferencing, instant message, chat, contacts, calendar, task, notes, news, ideas, vote, web and video conferencing, and document sharing.

13. (Currently Amended) The system of claim 1, the data management tool includes a plurality of applications, wherein at least one of the plurality of applications includes file storage pointers that are dynamic, and associated initially with a board within which the at least one application is launched.

14. (Currently Amended) The system of claim 13, the file board storage pointers of the board can be acted upon from another board by the least one of the plurality of applications ~~same application~~.

15. (Original) A computer employing the system of claim 1.

16. (Currently Amended) A ~~computer-readable~~ computer-readable medium having stored thereon ~~computer-executable~~ computer-executable instructions for carrying out the system of claim 1.

17. (Currently Amended) The system of claim 1, the data management tool facilitates an encrypted environment wherein at least one of the data communications and the data storage is encrypted.

18. (Currently Amended) A computer-implemented system that facilitates [[the]] management of data, comprising:

a computer-implemented context component that captures context information associated with a user-defined topic of a user in a first context; and  
a computer-implemented tracking component that tracks a change of the user from the first context to a second context, and automatically associates at least a portion of the context information with the second context.

19. (Currently Amended) The system of claim 18, the context component is associated with a board that is a collection of data and application functionality related to [[a]] the user-defined topic.

20. (Original) The system of claim 18, the context component is associated with a web that is a collection of interrelated boards, the web maintains the location of data of the respective boards when one or more of the interrelated boards are moved into a different board interrelationship, whether within the web or to another web.

21. (Original) The system of claim 18, the context information includes a relationship between a user and at least one of an application, application data, and user environment.

22. (Original) The system of claim 18, the context component captures context information of the first context and context information related to one or more other contexts.

23. (Original) The system of claim 22, the context information of the one or more other contexts is at least one of stipulated by the user, and suggested automatically by the system based upon various search and association criteria set by the user.

24. (Original) The system of claim 18, wherein data created in the first context can be associated with data created in the second context.

25. (Original) The system of claim 18, the context information is tagged to data when the data is created.

26. (Currently Amended) A computer-implemented method of facilitating data management, comprising computer-executable acts of:  
creating data within a user environment of a computing platform using an application, the data in the form of at least files and documents; ~~and~~  
automatically associating with ~~[[to]]~~ a user of the user environment, information related to the data, the application and the user environment ~~[[.]];~~  
tracking movement of the user from the user environment of the computing platform to a second user environment of the computing platform; and  
associating at least one of the data and the application with the second user environment such that the user employs ~~can employ~~ the at least one of the application and data from the second environment.

27. (Canceled)

28. (Original) The method of claim 26, further comprising capturing context information of the user.

29. (Original) The method of claim 26, further comprising indexing content of the environment such that a plurality of users can access the content from a plurality of user environments.

30. (Canceled)

31. (Original) The method of claim 26, the least one of the data and the application is associated automatically with the second user environment.

32. (Currently Amended) The method of claim 26, further comprising accessing the user environment and the second user environment using a browser.

33. (Original) The method of claim 26, further comprising communicating with the user environment using a TCP/IP communication protocol.

34. (Original) The method of claim 26, further comprising locating the user environment from a remote location using a URL address.

35. (Original) The method of claim 26, further comprising accessing the user environment via a portable wireless device.

36. (Currently Amended) A computer-implemented method of facilitating data management, comprising computer-executable acts of:

- providing a plurality of user environments;
- ordering two or more of the user environments in a number of different collections of the user environments;
- providing a plurality of applications that ~~[[to]]~~ generate and process data in the user environments, the data of a user environment is associated with the user ~~[[that]]~~ environment; and
- traversing the collections of the user environments with one or more of the applications to locate the data associated therewith.

37. (Original) The method of claim 36, the step of traversing is performed using a webslice that includes traversal information for locating the data associated with a given user environment.

38. (Original) The method of claim 37, the traversal information includes at least a collection ID, a user environment ID, and a routing path to the location of the environment data.

39. (Original) The method of claim 36, the collections, user environments, and associated data carry both hierarchical and non-hierarchical associations simultaneously within the applications.



40. (Currently Amended) A computer-readable medium having computer-executable instructions for performing a method of facilitating data management, the method comprising:

creating data within a user workspace environment of a computing platform using an application;

automatically associating with [[to]] a user of the user workspace environment, information related to the data, the application and the user workspace environment;

tracking movement of the user from the user workspace environment to a second user workspace environment of the computing platform; and

associating at least one of the data and the application with the second user workspace environment such that the user employs ~~can employ~~ the application and data from the second user workspace environment;[[.]] and

indexing the data of the user workspace such that a plurality of different users can access the data from a plurality of different user workspaces.

41. (Currently Amended) A computer-implemented system that facilitates [[the]] management of data, comprising:

computer-implemented means for creating data within a user workspace of a server environment using an application;

computer-implemented means for associating with [[to]] a user of the user workspace environment, information related to the data, the application and the user workspace environment;

computer-implemented means for tracking movement of the user from the user workspace environment to a second user workspace environment of the server; and

computer-implemented means for associating at least one of the data and the application with the second user workspace of the server environment such that the user can employ the application and data from the second user workspace environment.

42. (Currently Amended) A graphical user interface that facilitates ~~of data~~ [[the]] data management in a many-to-many methodology, the user interface facilitating at least data communications, data organization, data processing, and data storage, the interface comprising:

an input component that processes ~~for receiving~~ data management information of server-based user contexts, the data management information associated with,

capturing context information associated with a user in a first context of the server-based user contexts;

tracking a change of the user from the first context to a second context of the server-based user contexts; and

automatically associating at least a portion of the context information with the second context;

and

a presentation component that presents ~~for presenting~~ a portion of the data management information to facilitate user interaction therewith.

43. (Original) The interface of claim 42, the data management information includes a context interface for configuring a user context, a web, and a board.

44. (Currently Amended) The interface of claim 42, the data management information includes an interface for accessing an application that facilitates messaging and chat, and at least two or more ~~one~~ of telephony, ~~unified messaging~~, decision support, document management, portals, ~~chat~~, collaboration, search, vote, relationship management, calendar, personal information management, profiling, directory management, executive information systems, dashboards, cockpits, tasking, meeting and, web and video conferencing.

**REMARKS**

Claims 1-44 are currently pending in the subject application and are presently under consideration. A new listing of the claims is at pages 3-10 of the Reply. Claims 1, 3-10, 12-14, 16-19, 26, 32, 36, 40-42 and 44 have been amended to more clearly recite the invention. Claims 11, 27 and 30 have been canceled without prejudice due to incorporation into the corresponding independent claims.

Figure 1 has been amended by an attached Replacement Sheet to remove a double instance of item label 100 and to notate the following items with subscripts: items 104 (as CONTEXT<sub>1</sub>) and item 114 (as CONTEXT<sub>N</sub>), as provided in the description. Replacement sheets for Figures 15-20 are provided as attachments herein.

A new Power of Attorney and accompanying Statement under 37 C.F.R. 3.73(b) are attached.

Copies of a previously faxed preliminary amendment are provide in support of the amendments to the Cross-Reference section.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Objection to the drawings**

The drawings are objected to due to copy problems related to Figures 15-20. Replacement sheets for Figures 15-20 are attached herein that clearly show all aspects of the user interface. Accordingly, this objection should be withdrawn.

**II. Objection to the specification.**

The disclosure is objected to because Applicants have not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C., as follows: there is missing information such as application number and filing date for the following, for example, page 1, lines 5-12.

A Preliminary Amendment was filed by facsimile on February 4, 2005, by Applicants' representative that provided the requested corrections. However, it appears that only the first page was received at the Patent and Trademark Office. Attached are copies of the Preliminary Amendment as faxed, and confirmed by the PTO on February

4, 2005, via a fax confirmation page. However, appropriate amendment is also made in this Reply. Thus, Applicants' representative requests that this objection be withdrawn.

**III. Rejection of Claims 5 and 37 Under 35 U.S.C. §112, Second Paragraph**

Claims 5 and 37 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Applicants' representative respectfully requests that Examiner withdraw this rejection for at least the following reasons. Claim 5 has been amended to more clearly claim the invention by replacing the terms "substantially simultaneously" with "concurrently". It is believed that no new matter has been added.

With respect to the term "webslice" in claim 37, the Examiner's interpretation of a webslice meaning the web, is incorrect. Attention is directed to page 12, beginning at line 25, through page 14, line 31, which provides a detailed description of a webslice and its functionality. As described therein, a webslice is a routing algorithm, a relationship rule that defines a relationship between a web and one or more boards of that web. A "board" is defined on page 11, lines 10-11 as a collection of data and application functionality related to a user-defined topic. A "web" is defined on page 11, lines 16-17, as a collection of interrelated boards. Additionally, the description provides examples of relationships between a webslice, web, and boards.

Accordingly, this rejection should be withdrawn for claims 5 and 37.

**IV. Rejection of Claims 1-6, 8-11, 13-15, 17-31, 36-39 and 41 Under 35 U.S.C. §101**

Claims 1-6, 8-11, 13-15, 17-31, 36-39 and 41 stand rejected under 35 U.S.C. §101 because the claims are directed to a non-statutory subject matter, specifically, directed towards an abstract idea.

Applicants' representative respectfully requests that Examiner withdraw the rejection for at least the following reasons. Independent claims 1, 18, 26, 36 and 41 have amended to include "computer-implemented" terminology. Accordingly, this rejection

should be withdrawn for independent claims 1, 18, 26, 36 and 41 and the claims that depend therefrom.

**V. Rejection of Claims 1-44 Under 35 U.S.C. §102(e)**

Claims 1-44 are rejected under 35 U.S.C. §102(e) as being anticipated by Samuel J. McKelvie *et al.* (Pub. No. 2003/0217096 A1) hereinafter referred to as “McKelvie *et al.*”

Applicants’ representative respectfully requests that Examiner withdraw the rejection for at least the following reasons.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

McKelvie *et al.* teaches a network-based messaging system that comprises multiple agents to communicate messages between multiple users in real time using, for example, an XML document synchronization model. Each agent has properties defined in XML and can subscribe to properties of other agents. Each agent can notify other agents which subscribe to it of changes to its properties. The agents communicate using an XML or alternative extensible data interchange protocol. The agents include device agents to represent each of multiple user devices, which may include computers on a wireline network and mobile devices on a wireless network. The agents also include persona agents to represent each user. The persona agents collect information about the properties of other agents and publish the information to other, subscribing agents. Each persona agent comprises properties to maintain state information for each device used by the corresponding user. Most of the agents reside in a centralized agent system.

In contrast, the subject invention is much more than a messaging architecture as disclosed in McKelvie *et al.* The instant invention comprises a data management tool that is a unified, horizontal system for communications, organization, information processing, and data storage. The tool is a common workflow layer that is automated

with a scalable, relational database. The tool includes a relational database engine that facilitates many-to-many relationships among data elements, in addition to, one-to-many and many-to-many relationships. The novel architecture operates where the highest contextual assumption is that there exists an entity that consists of one or more users, and first assumes that files are associated with the user. Thus, data generated by applications is associated with an individual, group of individuals, and topical content, and not simply with a folder, as in traditional systems. When a user logs in to the system that employs the tool, the user enters into a personal workspace environment. This workspace is called a board, and is associated with a user context. From within this board, the tool makes accessible to the user a suite of applications for creating and manipulating data. Any user operating within any board has access to the suite of applications associated with that board, and can obtain access to any data in any form (e.g., documents and files) created by the applications and to which he or she has permission. Moreover, thereafter, the user can then move to shared workspaces (or boards), or other workspaces and access the same data or different data.

As amended, claim 1 recites, in part, "...a unified computer-implemented horizontal data management tool for at least many-to-many user functionality, the tool facilitating data communications, data organization, data processing, and data storage, the tool facilitates *collaboration among a plurality of users across a plurality of projects, the tool dynamically assigns at least one communications tool to at least one of the plurality of projects.*" McKelvie *et al.* does not teach the recited limitations.

Moreover, McKelvie *et al.* fails to teach limitations recited in claims that depend from claim 1. For example, in amended claim 7, the tool "...*integrates three or more different applications into a common application environment.*" Additionally, the "...*different applications comprising* telephony, unified messaging, decision support, document management, portals, chat, collaboration, search, vote, relationship management, calendar, personal information management, profiling, directory management, executive information systems, dashboards, cockpits, tasking, meeting and, web and video conferencing." McKelvie *et al.* does not teach or suggest the integration of three or more applications into a common application environment.

In dependent claim 13, McKelvie *et al.* does not teach or suggest “the tool includes a *plurality of applications*, wherein at least one of the plurality of applications *includes file storage pointers that are dynamic, and associated initially with a board within which the at least one application is launched.*” McKelvie *et al.* neither teaches *dynamic file storage pointers* nor the concept of a *board*.

The Examiner references Figure 3 as purporting to meet the limitations recited in claim 14. Claim 14 also recites the concept of “...*storage pointers that can be acted upon from another board by the same application.*” Applicants’ representative respectfully requests that the Examiner point out with specificity how Figure 3 anticipates the claimed limitations.

Accordingly, it is respectfully requested by Applicants’ representative that claim 1 and dependent claims 2-10, and 12-17 be allowed.

As amended, independent claim 18 recites a computer-implemented context component that *captures context information associated with a user-defined topic of a user in a first context, and* a computer-implemented *tracking component that tracks a change of the user from the first context to a second context, and automatically associates at least a portion of the context information with the second context.* McKelvie *et al.* does not teach or suggest such recited limitations.

Moreover, McKelvie *et al.* does not teach or suggest the concepts of a board, a web, and/or collections of boards and webs as recited in the claims and described in the description. Accordingly, it is requested that claim 18 and the claims 19-25 that depend therefrom be allowed.

Amended independent claim 26 recites, in part “...creating data within a *user environment of a computing platform* using an application, *the data in the form of at least files and documents...*” and “*tracking movement of the user from the user environment of the computing platform to a second user environment of the computing platform.*” McKelvie *et al.* does not teach or suggest tracking movement of the user between environments of the same computing platform. Moreover, as recited in additional limitations, McKelvie *et al.* does not teach or suggest “associating at least one of the data and the application with the second user environment such that *the user employs the at least one of the application and data from the second environment.*”

Accordingly, Applicant's representative requests that this claim and claims 28, 29 and 31-35 that depend therefrom be allowed.

With respect to independent claim 36, the subject claim recites in part an act of **"ordering two or more of the user environments in a number of different collections of the user environments..."** McKelvie *et al.* does not teach or suggest an act of ordering. Additionally, McKelvie *et al.* does not teach the concept of "collections" as described in the subject description. The Examiner references paragraph [0040] in support of this rejection. However, nothing in this paragraph teaches anything related to at least an act of ordering as recited in the claim 36. Additionally, in claim 38 recites a "collection ID". McKelvie *et al.* does not teach or suggest use of a collection ID. Accordingly, claim 36 and claims 37-39 that depend therefrom should be allowed.

Amended independent claim 40 recites in part, **"creating data within a user workspace of a computing platform..."** and **"...tracking movement of the user from the user workspace to a second user workspace of the computing platform."** McKelvie *et al.* does not teach or suggest such limitations. Additionally, further recited limitations include **"associating the data and the application with the second user workspace such that the user employs the application and data from the second user workspace environment..."** and **"indexing the data of the user workspace such that a plurality of different users can access the data from a plurality of different user workspaces."** McKelvie *et al.* neither teaches nor suggests such limitations. Thus, it is respectfully requested that the rejection for this claim be withdrawn.

Amended independent claim 41 recites, in part, **"...creating data within a user workspace of a server using an application"**, **"...tracking movement of the user from the user workspace to a second user workspace of the server"**, and **"...associating the data and the application with the second user workspace of the server such that the user can employ the application and data from the second user workspace."** McKelvie *et al.* neither teaches nor suggests such limitations. Accordingly, this claim should be allowed.

Independent claim 42, as amended, recites in part **"a graphical user interface... comprising...an input component that processes data management information of server-based user contexts..."** McKelvie *et al.* does not teach or suggest server-based user context. Additionally, McKelvie *et al.* does not teach **"tracking a change of the user**



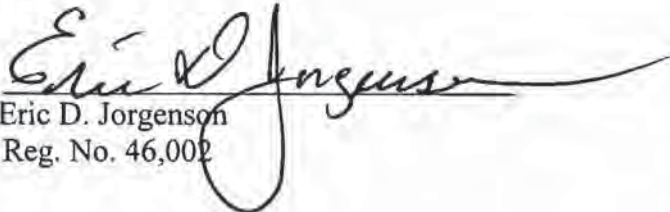
*from the first context to a second context of the server-based user contexts.”* Moreover, as recited in dependent claim 43, McKelvie *et al.* does not teach or suggest the use of webs and boards. Finally, McKelvie *et al.* does not teach the limitations of amended claim 44, which include chat and messaging, and *two or more* additional application functions. Accordingly, claims 42-44 should be allowed.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants’ undersigned representative at the telephone number below.

Respectfully submitted,

  
Eric D. Jorgenson  
Reg. No. 46,002

Law Office of Eric D. Jorgenson, Esq.  
1457 King Road  
Hinckley, Ohio 44233  
Telephone (216) 225-4169  
Facsimile (330) 278-3135

# **EXHIBIT B**

1274

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

LEADER TECHNOLOGIES, ) Trial Volume 5  
INC., )  
)  
Plaintiff, )  
) C.A. No. 08-862-JJF-LPS  
v. )  
)  
FACEBOOK, INC., a )  
Delaware corporation, )  
)  
Defendant. )

Friday, July 23, 2010  
9:00 a.m.

BEFORE: THE HONORABLE LEONARD P. STARK  
United States District Court Magistrate

APPEARANCES:

POTTER, ANDERSON & CORROON, LLP  
BY: PHILIP A. ROVNER, ESQ.

-and-

KING & SPALDING  
BY: PAUL ANDRE, ESQ.  
BY: LISA KOBIALKA, ESQ.  
BY: JAMES HANNAH, ESQ.

Counsel for Plaintiff  
Hawkins Reporting Service  
715 North King Street - Wilmington, Delaware 19801  
(302) 658-6697 FAX (302) 658-8418

1                   Let's hear from Mr. Andre, and  
2 then I want to give Facebook some time.

3                   MR. ANDRE: Your Honor, on the  
4 contributory infringement, it's a pretty  
5 standard instruction. I don't see anything  
6 extraordinary about the points, puts out the  
7 elements as set forth, looks like Facebook wants  
8 to insert the statute into the instruction to  
9 some degree, and I don't think that's necessary  
10 or appropriate at this point.

11                   I don't see the big issue here  
12 because the Thrasher case has come out and  
13 determined that any type of contributory  
14 infringement to the patent requires a product in  
15 the stream of commerce, and then you have three  
16 elements set for most part.

17                   THE COURT: Let me turn it over to  
18 Facebook at this point. Feel free to address  
19 any of the issues that have been raised or  
20 others if you think there are others that are  
21 important, and basically we have up to  
22 twenty minutes because I do want to leave the  
23 last five minutes to hear from Leader.

24                   MR. WEINSTEIN: There's only two

1 issues to address. The most critical ones on  
2 jury instruction, 3.4.

3 Your Honor, I'd like to hand up a  
4 portion of some of the transcript from the trial  
5 to illustrate why we need an instruction that  
6 "wherein" does not mean when.

7 THE COURT: You've already cited  
8 pretty extensively in your support, which we  
9 looked at, so in the spirit of compromise,  
10 construing at this late moment the term  
11 "wherein" to mean in which, which has been  
12 agreed to by Leader, is not satisfactory to you?

13 MR. WEINSTEIN: It isn't, Your  
14 Honor. The problem with in which, Your Honor,  
15 they're going to make the exact, same argument  
16 what I heard today, is they think this is a  
17 factual issue to go to the jury.

18 When I read the '02 Micro case  
19 last night, I was haunted how similar that case  
20 is to this. There was a claim term only if like  
21 there. This case, they presented witnesses and  
22 cross-examined witnesses on what do you think  
23 this term means.

24 What ultimately came down and the

1 Court decided, he was going to send it to the  
2 jury. The federal circuit said when the parties  
3 present a fundamental dispute regarding the  
4 scope of a claim term, it is the Court's duty to  
5 resolve it.

6 The fundamental dispute is  
7 regarding does "wherein" mean when, or does the  
8 claim require a dynamic element, which means you  
9 look to the proceeding claim element? That's a  
10 dispute Your Honor needs to resolve as a matter  
11 of law.

12 THE COURT: Help me, though, why I  
13 haven't resolve it by construing "wherein" to  
14 mean in which, and you all make your arguments  
15 or don't. You're stuck with the Court's claim  
16 construction as a matter of law. The jury is  
17 told they have to follow my claim construction.  
18 How is that any different than all the other  
19 claim construction issues?

20 MR. WEINSTEIN: Ultimately let's  
21 say the construction comes in in which you can  
22 say at which point. There's lots of different  
23 definitions. Ultimately wherein is a connector  
24 between two clauses.

1                   The question is, does it connote a  
2 temporal sequence like something happens when  
3 the user accesses the data from the second  
4 context? That's the argument.

5                   They're taking the update of  
6 method to metadata can happen when the user  
7 accesses data. That's a claim construction  
8 question. We think it's been resolved by Judge  
9 Farnan's order.

10                   THE COURT: Where is it resolved  
11 in his order?

12                   MR. WEINSTEIN: It's resolved in  
13 his order.

14                   THE COURT: Why do I even need to  
15 define wherein if dynamically has done it?

16                   MR. WEINSTEIN: The only reason we  
17 need to define it, Leader is making these  
18 arguments. They're putting prosecution history  
19 evidence before witnesses and arguing the  
20 meaning of claim terms, which is the exclusive  
21 province of Your Honor. There's going to be  
22 arguments in closing as to what ultimately the  
23 legal implication of wherein is. That's  
24 something that should not go to the jury.

1 THE COURT: And your paragraph on  
2 prosecution history that you propose, that does  
3 not take care of your problem if I were to keep  
4 that in as well as your wherein construction?

5 MR. WEINSTEIN: The wherein  
6 construction would not do it. The prosecution  
7 history would help, but ultimately, Your Honor  
8 has to decide whether or not the claims are  
9 satisfied with dynamically updating the metadata  
10 when user accesses.

11 If that issue is not resolved,  
12 ultimately instituting "wherein" as some  
13 connector is not going to stop the arguments  
14 from being made that are legal in nature.

15 THE COURT: If I were to add line  
16 five, which claims which would I put the term  
17 "wherein" means in which. Perhaps, not when.  
18 In which claims, what number claims, would I  
19 write in?

20 MR. WEINSTEIN: Your Honor, the  
21 claims that have the wherein clause are one,  
22 nine, and four also, and --

23 MR. HANNAH: All the dependent  
24 claims have wherein as well.



1                   MR. WEINSTEIN: I don't think  
2 that's right, but I know seven has wherein in  
3 it.

4                   The claims where it really matters  
5 is one, nine, and twenty-three.

6                   Twenty-one, very interestingly,  
7 Your Honor doesn't use the word "wherein." It  
8 uses the term "such that," and that is something  
9 that we agreed to, is to construe "wherein" to  
10 mean "such that," which is consistent with  
11 what's in claim twenty-one. That's another  
12 synonym that we think is clearer.

13                   THE COURT: Okay. Certainly this  
14 is an important issue. I agree with that, but I  
15 assume there's probably another you want to  
16 address.

17                   MR. WEINSTEIN: On Mr. Lamb's  
18 testimony, the only thing we wanted was to say  
19 two points.

20                   One is, a written correction to  
21 the deposition does not erase the witness's  
22 prior answer, and the jury is free to consider  
23 the changes in any way they see fit, the same  
24 way they would judge any issue of credibility.

1 parties agree to was a commercial success  
2 stipulation, but they have not reached agreement  
3 on that as well. So those are the -- we can get  
4 those to you as soon -- we'll keep working this  
5 weekend and hopefully get them to you --

6 THE COURT: Right. So on all of  
7 those issues, the limiting instructions and  
8 which I think are limited to nine topics that  
9 you just mentioned.

10 MR. ANDRE: Yeah.

11 THE COURT: I do want to see what  
12 the parties propose, what their positions are,  
13 and let's say by noon tomorrow. We're going to  
14 follow this weekend the procedures we did last  
15 week where I send -- if it's not under seal, go  
16 ahead and do ECF. We can pull it off of ECF.

17 But if any portion of it is under  
18 seal, email it to Mr. Golden and he'll get it to  
19 the rest of us.

20 MR. ANDRE: Mr. Rovner will take  
21 care of the rest.

22 THE COURT: Before you sit down,  
23 whoever wants to address it on the 3.4 on this,  
24 you know, is it enough for me to construe

1       wherein as in which and not go the extra mile  
2       and say not when?

3                 Mr. Weinstein, not that I don't  
4       enjoy all my time with you, but I don't want to  
5       sign up automatically for redoing this trial.

6                 MR. ANDRE: Your Honor, the issue  
7       of claim construction should have been brought  
8       up a long time ago, if they want to bring it up.

9                 The fact of the matter, experts  
10       have been interpreting this how they've been  
11       interpreting it. The expert on the stand, Dr.  
12       Greenberg, has interpreted is as a consequence.  
13       That's how he termed wherein.

14                Dr. Vigna determined it as in  
15       which. I don't think, you know, if you say not  
16       when is a negative limitation.

17                THE COURT: Let's be clear. If I  
18       don't say not when, you're going to argue when.  
19       They're going to argue not when.

20                MR. ANDRE: Well --

21                THE COURT: And you don't think  
22       that means we're all going to get reversed the  
23       minute we get to the Federal Circuit?

24                MR. ANDRE: Well, I'm not going to

1 argue when. I'm arguing which.

2 That's been our position  
3 throughout this entire case. It is in which.  
4 That's the dictionary's definition of the word.

5 So we think, as Mr. Hannah said,  
6 the dynamically is a functional language, not  
7 pure grammatical and temporal in that way. So  
8 we're very confident that that's not going to be  
9 an issue.

10 But if they start arguing, you  
11 know, not thereafter, or as a consequence or  
12 something along those lines like they had been,  
13 their other expert, Dr. Kearns, did the same  
14 thing. I asked him, I said, You mean  
15 thereafter?

16 He said, Yeah, afterwards. So  
17 everybody has had a different definition. If  
18 you want to give a proper definition, give the  
19 proper definition.

20 If you want to interpret, say what  
21 it's not, we should also put some other things  
22 what it's not as well as what your experts have  
23 proposed. If you want to say it's not when,  
24 then it should not say it's not thereafter or

1 State of Delaware )  
 )  
2 New Castle County )

3

4

5

CERTIFICATE OF REPORTER

6

7

I, Heather M. Triozzi, Registered

8

Professional Reporter, Certified Shorthand Reporter,

9

and Notary Public, do hereby certify that the

10

foregoing record, Pages 1274 to 1642 inclusive, is a

11

true and accurate transcript of my stenographic notes

12

taken on July 23, 2010, in the above-captioned

13

matter.

14

15

IN WITNESS WHEREOF, I have hereunto set my

16

hand and seal this 23rd day of July, 2010, at

17

Wilmington.

18

19

20

21

Heather M. Triozzi, RPR, CSR  
Cert. No. 184-PS

22

23

24

# **EXHIBIT C**

<b>Interview Summary</b>	<b>Application No.</b> 10/732,744	<b>Applicant(s)</b> MCKIBBEN ET AL.	
	<b>Examiner</b> DIANE D. MIZRAHI	<b>Art Unit</b> 2165	

All participants (applicant, applicant's representative, PTO personnel):

(1) Eric D. Jorgenson. (3) \_\_\_\_\_.

(2) Diane D. Mizrahi. (4) \_\_\_\_\_.

Date of Interview: 15 August 2006.

Type: a)  Telephonic b)  Video Conference  
c)  Personal [copy given to: 1)  applicant 2)  applicant's representative]

Exhibit shown or demonstration conducted: d)  Yes e)  No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 18, 26, 36, 40- 41, 45, and 52.

Identification of prior art discussed: NONE.

Agreement with respect to the claims f)  was reached. g)  was not reached. h)  N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant and Examiner discussed amending claims 18, 26, 36, 41, 45, and 52 to overcome the prior art by an Examiner's Amendment (attached).

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

  
DIANE D. MIZRAHI  
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
Examiner's signature, if required

### Summary of Record of Interview Requirements

#### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

##### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



# **EXHIBIT D**

RECEIVED  
CENTRAL FAX CENTER

PATENT


JUN 21 2006

LEADP102USA

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being faxed to 571-273-8300 on the date shown below to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date: 6/21/06

  
Eric D. Jorgenson

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of:

Applicant(s): Michael McKibben, *et al.*

Examiner: Diane Mizrahi

Serial No: 10/732,744

Art Unit: 2165

Filing Date: December 10, 2003

Title: DYNAMIC ASSOCIATION OF ELECTRONICALLY STORED  
INFORMATION WITH ITERATIVE WORKFLOW CHANGES

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

---

**SUPPLEMENTAL REPLY TO A REPLY TO THE FINAL OFFICE ACTION DATED  
JANUARY 5, 2006 THAT ACCOMPANIED THE RCE**

---

Dear Sir:

Favorable reconsideration of the above-identified patent application is respectfully requested in view of the amendments and comments below.

Accompanying this document for entry in the file wrapper is a copy of the RCE Transmittal previously filed but not of record.

RECEIVED  
CENTRAL FAX CENTER

10/732,744

JUN 21 2006

LEADP102USA

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-17 (Cancelled)

18. (Currently Amended) A computer-implemented network-based system that facilitates management of data, comprising:

a computer-implemented context component of the network-based system for capturing context information associated with user-defined ~~topic~~ data created by user interaction of a user in a first context of the network-based system, the context component dynamically storing associating the context information in metadata associated with the user-defined data via metadata, that is the user-defined data and metadata stored on a storage component of the network-based system; and

a computer-implemented tracking component of the network-based system for tracking a change of the user from the first context to a second context of the network-based system and automatically updating the stored metadata based on the change associating associates at least a portion of the context information with the second context in the metadata.

19. (Currently Amended) The system of claim 18, the context component is associated with a workspace, which is a collection of data and application functionality related to the user-defined ~~topic~~ data.

20. (Previously Presented) The system of claim 18, the context component is associated with a web, which web is a collection of interrelated workspaces, the web maintains a location of data of the respective interrelated workspaces when one or more of the interrelated workspaces are moved into a different workspace interrelationship.

10/732,744

LEADP102USA

21. (Previously Presented) The system of claim 18, the context information includes a relationship between the user and at least one of an application, application data, and user environment.

22. (Previously Presented) The system of claim 18, the context component captures context information of the first context and context information related to at least one other context.

23. (Previously Presented) The system of claim 22, the context information of the at least one other context is at least one of stipulated by the user and suggested automatically by the system based upon search and association criteria set by the user.

24. (Previously Presented) The system of claim 18, wherein data created in the first context is associated with data created in the second context.

25. (Currently Amended) The system of claim 18, the context information is tagged to the user-defined data via the data metadata when the user-defined data is created.

10/732,744

LEADP102USA

26. (Currently Amended) A computer-implemented method of managing data, comprising computer-executable acts of:

creating data within a user environment of a web-based computing platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents;

dynamically associating metadata with the data, the data and metadata stored on a storage component of the web-based computing platform, the metadata includes information related to the ~~[[a]] user of the user environment, to the data, to the application, and to the user environment;~~

tracking movement of the user from the user environment of the web-based computing platform to a second user environment of the web-based computing platform; and

updating associating in the stored metadata with an association of at least one of the data and the application with the second user environment such that the user employs the at least one of the application and the data from the second environment.

27. (Canceled)

28. (Original) The method of claim 26, further comprising capturing context information of the user.

29. (Previously Presented) The method of claim 26, further comprising indexing content of the user environment such that a plurality of users can access the content from an associated plurality of user environments.

30. (Canceled)

31. (Original) The method of claim 26, the least one of the data and the application is associated automatically with the second user environment.

10/732,744

LEADP102USA

32. (Previously Presented) The method of claim 26, further comprising accessing the user environment and the second user environment using a browser.
33. (Original) The method of claim 26, further comprising communicating with the user environment using a TCP/IP communication protocol.
34. (Original) The method of claim 26, further comprising locating the user environment from a remote location using a URL address.
35. (Original) The method of claim 26, further comprising accessing the user environment via a portable wireless device.
36. (Currently Amended) A computer-implemented method of managing data, comprising computer-executable acts of:
- generating providing a plurality of user environments in a web-based system;
  - ordering two or more of the plurality of user environments according to different arrangements of the user environments;
  - providing a plurality of applications for generating and processing data in the user environments, the data of a user environment is associated with the user environment in metadata that corresponds to the data;
  - storing in a storage component ordering information related to the ordering of the two or more of the plurality of user environment; and
  - traversing the different arrangements of the user environments with one or more of the applications based on the ordering information to locate the data associated therewith.
37. (Currently Amended) The method of claim 36, the act step of traversing is performed using a webslice that includes traversal information for locating the data associated with a given user environment.

10/732,744

LEADP102USA

38. (Original) The method of claim 37, the traversal information includes at least a collection ID, a user environment ID, and a routing path to the location of the environment data.

39. (Currently Amended) The method of claim 36, the different arrangements, user environments, and associated data carry both hierarchical and non-hierarchical associations simultaneously within the plurality of applications.

40. (Currently Amended) A computer-readable medium for storing having computer-executable instructions for performing a method of managing data, the method comprising:

creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application;

dynamically associating metadata with the data, the data and metadata stored on the web-based computing platform, the metadata includes information related to [[a]] the user of the user workspace, to the data, to the application and to the user workspace;

tracking movement of the user from the user workspace to a second user workspace of the web-based computing platform;

dynamically associating the data and the application with the second user workspace in the metadata such that the user employs the application and data from the second user workspace; and

indexing the data created in the user workspace such that a plurality of different users can access the data via the metadata from a corresponding plurality of different user workspaces.

10/732,744

LEADP102USA

41. (Currently Amended) A computer-implemented system that facilitates management of data, comprising:

computer-implemented means for creating data by interaction of a user within a user workspace of a server using an application;

computer-implemented means for associating metadata with the data, the metadata stored in association with the data on storage means of the server, the metadata includes information related to a user of the user workspace, to the data, to the application and to the user workspace;

computer-implemented means for tracking movement of the user from the user workspace to a second user workspace of the server; and

computer-implemented means for associating the data and the application with the second user workspace ~~of the server~~ in the metadata such that the user can employ the application and data from the second user workspace.

Claims 42-44 (Cancelled)

45. (Currently Amended) A computer-implemented system that facilitates management of data, comprising:

a computer-implemented context component of a web-based server system for defining a first user workspace of the web-based server system, assigning one or more applications to the first user workspace, capturing context data associated with user interaction of a user while in the first user workspace, and for storing the context data as metadata on a storage component of the web-based server system, which metadata is dynamically associated with data created in the first user workspace; and

a computer-implemented tracking component of the web-based server system for tracking change information associated with a change in access of the user from the first user workspace to a second user workspace, and dynamically storing the change information on the storage component as part of the metadata.



**10/732,744****LEADP102USA**

46. (Previously Presented) The system of claim 45, wherein the tracking component automatically creates the metadata when the user accesses the first user workspace.

47. (Previously Presented) The system of claim 45, wherein the context component captures relationship data associated with a relationship between the first user workspace and at least one other user workspace.

48. (Previously Presented) The system of claim 45, wherein an application associated with the first user workspace is automatically accessible via the second user workspace when the user moves from the first user workspace to the second user workspace.

49. (Previously Presented) The system of claim 45, wherein context data relating to an item of communication is automatically stored and used in performance of communication tasks.

50. (Canceled)

51. (Previously Presented) The system of claim 45, wherein the context component captures data and application functionality related to a user-defined topic of the first user workspace, and includes the data and application functionality in the metadata.

52. (Currently Amended) The system of claim 45, wherein when the data created in the first user workspace is accessed from [[a]] the second user workspace, in response to which the context component adds information to the metadata about the second user workspace.

10/732,744

LEADP102USA

53. (Previously Presented) The system of claim 45, wherein the first user workspace is associated with a plurality of different applications, the plurality of different applications comprising telephony, unified messaging, decision support, document management, portals, chat, collaboration, search, vote, relationship management, calendar, personal information management, profiling, directory management, executive information systems, dashboards, cockpits, tasking, meeting and, web and video conferencing.

54. (Currently Amended) The system of claim 45, ~~wherein the further comprising a storage component stores system for storing~~ the data and the metadata according to at least one of a relational and an object storage methodology.

55. (Currently Amended) The system of claim 45, wherein storing of the metadata in the storage component in association with data facilitates many-to-many functionality of the data via the metadata.

56. (Previously Presented) The system of claim 45, wherein the first user workspace provides access to at least one communications tool, which includes e-mail, voicemail, fax, teleconferencing, instant message, chat, contacts, calendar, task, notes, news, ideas, vote, web and video conferencing, and document sharing functionality.

57. (Previously Presented) The system of claim 45, wherein one or more applications includes file storage pointers that are dynamic and associated with the first user workspace.

58. (Canceled)

59. (Previously Presented) The system of claim 45, wherein the context component facilitates encryption of the data generated in the first user workspace.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT OR DRAWING
- BLURRED OR ILLEGIBLE TEXT OR DRAWING
- SKEWED/SLANTED IMAGES
- COLOR OR BLACK AND WHITE PHOTOGRAPHS
- GRAY SCALE DOCUMENTS
- LINES OR MARKS ON ORIGINAL DOCUMENT
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**

10/732,744

LEADP102USA

**REMARKS**

Applicants' representative thanks the Examiner for courtesies extended during multiple interviews regarding prosecution of the subject application.

This Reply is supplemental to a Reply to a Final Rejection filed in conjunction with an RCE. Additionally, it is intended that amendments to the specification submitted in the previous Reply be entered.

Claims 18-26, 28, 29, 31-41, and 45-59 are currently pending in the subject application and are presently under consideration. A new listing of the claims is provided at pages 2-9 of the Reply. Claims 50 and 58 have been cancelled without prejudice. Claims 1-17, 27, 30, and 42-44 were cancelled in a previous Reply. Applicants' representative reserves the right to prosecute the canceled claims in a later application.

Claims 18, 19, 25, 26, 36-37, 39-41, 45, 52, 54 and 55 have been amended to more clearly recite the invention.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 18, 26, 36, 40, 41, and 45 Under 35 U.S.C. §101**

In conversation with the Examiner, independent claims 18, 26, 36, 40, 41, and 45 stand rejected under 35 U.S.C. §101 because the claimed invention lacks patentable utility. Withdrawal of this rejection is requested for at least the following reasons. The claims, as amended, produce a useful, concrete and tangible result.

# **EXHIBIT E**

~~UNDER SEAL~~ sealed

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF VIRGINIA

FILED

PM

2004 JUN 23 P 4:00

CLERK US. DISTRICT COURT  
ALEXANDRIA, VIRGINIA  
Case No. CV-04-70 (LMB)

---

IPXL Holdings, LLC,  
  
*Plaintiff,*  
  
v.  
  
Amazon.com, Inc.,  
  
*Defendant.*

---

**MEMORANDUM IN SUPPORT OF DEFENDANT AMAZON.COM, INC.'S MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT AND INVALIDITY**

John F. Scalia, Esq. (VSB #46444)  
David A. Kessler, Esq. (VSB #42315)  
GREENBERG TRAURIG, LLP  
1750 Tysons Boulevard  
Suite 1200  
McLean, VA 22102  
Tel: (703) 749-1300

David A. Zapolsky, Esq.  
Vice President & Associate General Counsel  
AMAZON.COM, INC.  
P.O. Box 81226  
Seattle, WA 98108-1226  
Tel: (206) 266-1323

David K. Callahan, P.C., Esq.  
Thomas G. Pasternak, Esq.  
KIRKLAND & ELLIS LLP  
200 East Randolph Drive  
Chicago, Illinois 60601  
Tel: (312) 861-2000

**TABLE OF CONTENTS**

	<b>Page</b>
<b>UNDISPUTED FACTS .....</b>	<b>2</b>
I.    THE ASSERTED CLAIMS OF THE '055 PATENT .....	2
II.   AMAZON.COM AND AMAZON'S 1-CLICK® FEATURE .....	2
A.    Amazon's 1-Click® Feature Is Part Of A System For Placing Orders For Books And Other Goods On The Internet. ....	2
B.    ATM Technology in the mid-1990's .....	5
C.    The Gatto '055 Patent .....	5
D.    The Prior Art Patents .....	5
<b>LEGAL STANDARDS .....</b>	<b>5</b>
A.    Summary Judgment .....	5
B.    Noninfringement .....	6
C.    Invalidity .....	6
III.  ARGUMENT .....	7
IV.  Amazon's 1-Click® Feature Does Not Literally Meet the Limitations of Claim 1 of the '055 Patent. ....	8
A.    Amazon's 1-Click Feature Is Not "An Electronic Financial Transaction System For Executing Financial Transactions." .....	8
1.    Amazon's 1-Click® Feature is Not an "Electronic Financial Transaction System." .....	8
2.    Amazon's 1-Click® Feature Is Not a System for "Executing Financial Transactions." .....	10
B.    Amazon's 1-Click® Feature Does Not Meet the Limitation "The Transactions Being Characterized By a Transaction Type and a Plurality of Transaction Parameters." .....	11
1.    There Are No Types of Transaction. ....	11
2.    There Is No "Plurality of Transaction Parameters." .....	12
C.    Amazon's 1-Click® Feature Does Not Meet the Limitation "A Terminal Device Selectively Connectable to the Central Controller Through The Communications Network." .....	13
D.    Amazon's 1-Click® Feature Does Not Meet The Limitation "Means For Storing User-defined Transaction Information, the	

	Transaction Information Comprising At Least One of User-defined Transactions and User-defined Transaction Parameters.”	14
1.	There is no “Means For Storing User-defined Transaction Information, the Transaction Information Comprising At Least One of User-defined Transactions and User-defined Transaction-Parameters.”	14
E.	Amazon’s 1-Click® Feature Does Not Meet The Limitation “Display on a Single Screen Stored Transaction Information.”	15
F.	Amazon’s 1-Click® Feature Does Not Meet The Limitation “Enabling a User to Use the Displayed Transaction Information to Execute a Financial Transaction or to Enter Selections to Specify One or More Transaction Parameters”	16
V.	Amazon’s 1-Click® Feature Does Not Literally Meet the Limitations of Claim 2 of the ’055 Patent.	18
A.	Amazon’s 1-Click® Feature Does Not Meet the Limitation “Predicts Transaction Information That a User of the Terminal Will Desire Based on Stored Data for that User.”	18
VI.	Amazon’s 1-Click® Feature Does Not Literally Meet the Limitations of Claim 9 of the ’055 Patent	20
A.	Amazon’s 1-Click® Feature Does Not Meet The Limitation “Means for Identifying a User Prior to Enabling the User to Execute a Transaction.”	20
VII.	Amazon’s 1-Click® Feature Does Not Literally Meet the Limitations of Claim 15 of the ’055 Patent.	21
VIII.	Amazon’s 1-Click® Feature Does Not Literally Meet the Limitations of Claim 25 of the ’055 Patent.	21
IX.	Due to the MANNER in which 1-Click® ordering occurs, Amazon cannot infringe the ’055 patent.	21
A.	Amazon Does Not Directly Infringe the ’055 Patent For Additional Reasons.	21
B.	Amazon Cannot Be Liable For Indirect Infringement.	22
X.	The asserted claims are invalid.	23
A.	The Prior Art Patents	23
1.	The Coutts patent is invalidating prior art.	23
2.	The Tarbox patent is invalidating prior art.	24
3.	The Kelly patent is invalidating prior art.	25
B.	The Single Screen Limitation	25



C. The Prior Art Patents Each Contain the Single Screen Limitation of Claim 1.....26

1. Coutts Teaches the “Single Screen” Limitation Under Either Amazon’s or IPXL’s Proposed Constructions. ....26

2. Tarbox Teaches the “Single Screen” Limitation Under Either Amazon’s or IPXL’s Proposed Constructions. ....29

3. Kelly Teaches the “Single Screen” Limitation Under IPXL’s Proposed Constructions.....33

D. There is No Genuine Issue of Fact Regarding The Remaining Limitations of Claim 1.....34

E. Coutts Contains The Additional Limitations of Claim 2.....35

F. The Additional Limitations of Claim 9 are Contained in Each of the Prior Art Patents.....36

G. Coutts Contains The Additional Limitations of Claim 15.....36

H. Coutts Contains The Additional Limitations of Claim 25.....36

I. Claim 25 of the ‘055 Patent is Also Invalid under 35 U.S.C. § 112, ¶ 2 and § 101 as a Matter of Law.....37

1. Claim 25 is Indefinite Under 35 U.S.C. §112 ¶ 2. ....37

2. Claim 25 is Also Invalid Under 35 U.S.C. §101. ....38

**CONCLUSION** .....39

**TABLE OF AUTHORITIES**

	Page
<b>Cases</b>	
<i>Abbott Labs. v. Syntron Bioresearch Inc.</i> , 334 F.3d 1343 (Fed. Cir. 2003).....	7
<i>Allen Eng'g Corp. v. Bartell Indus., Inc.</i> , 299 F.3d 1336 (Fed. Cir. 2002).....	6
<i>Anderson v. Liberty Lobby, Inc.</i> , 477 U.S. 242 (1986).....	6
<i>Avia Group Int'l, Inc. v. L.A. Gear California, Inc.</i> , 853 F.2d 1557 (Fed. Cir. 1988).....	6, 28
<i>Beckson Marine, Inc. v. NFM, Inc.</i> , 292 F.3d 718 (Fed. Cir. 2002).....	29
<i>Black &amp; Decker Inc. v. Catalina Lighting</i> , 953 F.Supp. 134 E.D. Va. 1997) .....	22, 23
<i>Celotex Corp. v. Catrett</i> , 477 U.S. 317 (1986).....	6
<i>Dayco Prods. Inc. v. Total Containment, Inc.</i> , 329 F.3d 1358 (Fed. Cir. 2003).....	6
<i>Desper Prods., Inc. v. QSound Labs, Inc.</i> , 157 F.3d 1325 (Fed. Cir. 1998).....	6
<i>Exxon Research and Eng'g Co. v. United States</i> , 265 F.3d 1371 (Fed. Cir. 2001).....	37
<i>Ferguson Bearegard/Logic Controls v. Mega Sys.</i> , 350 F.3d 1327 (Fed. Cir. 2003).....	22
<i>Hewlett-Packard v. Bausch &amp; Lomb</i> , 909 F.2d 1464 (Fed. Cir. 1990).....	22
<i>Laitram Corp. v. Rexnord, Inc.</i> , 939 F.2d 1533 (Fed. Cir. 1991).....	1
<i>Lang v. Pacific Marine and Supply Co., Ltd.</i> , 895 F.2d 761 (Fed. Cir. 1990).....	21

*Manville Sales Corp. v. Paramount Sys., Inc.*,  
917 F.2d 544 (Fed. Cir. 1990)..... 22, 23

*Moba, B.V. v. Diamond Automation*,  
325 F.3d 1306 (Fed. Cir. 2003)..... 22

*Phillips v. AWH Corp.*,363 F.3d 1207 (Fed. Cir. 2004)..... 6

*Price v. Symsek*,  
988 F.2d 1187 (Fed. Cir. 1993)..... 24

*Singh v. Brake*,  
222 F.3d 1362 (Fed Cir. 2000)..... 24

*TechSearch, L.L.C. v. Intel Corp.*,  
286 F.3d 1360 (Fed. Cir. 2002)..... 6

*Udin v. J.Kaufman Iron Works, Inc.*,  
342 F. Supp. 1090 (S.D.N.Y. 1972)..... 7

*University of Rochester v. G.D. Searle & Co., Inc.*,  
358 F.3d 916 (Fed. Cir. 2004)..... 7

**Statutes**

15 U.S.C. § 1693h ..... 10

15 U.S.C. 1693a..... 9

35 U.S.C. § 271(a)..... 21

In symmetry with its prohibited attempt to stretch the claims of the '055 patent beyond their clear meaning, as detailed in Amazon's claim construction brief, IPXL attempts to apply claims covering only financial transactions that can be performed on an electronic fund transfer system ("EFT") to a feature for ordering books and other products using the Internet. Amazon is not an EFT system; it does not execute financial transactions or perform any other activity on an EFT system. Amazon is an Internet retailer—consumers go to Amazon.com to order books and other goods using the Internet. One way consumers can order goods is to use Amazon's 1-Click® feature (the *only* aspect of Amazon that IPXL accuses of infringement). The 1-Click® Feature does not execute financial transactions on an EFT system—Amazon contracts with third party financial institutions to process and settle the payments for the goods that Amazon customers have ordered. This Court should grant summary judgment that the 1-Click® Feature does not literally infringe the asserted claims of the '055 patent.<sup>1</sup> *See Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1535 (Fed. Cir. 1991) ("To establish infringement, every limitation set forth in a patent claim must be found in an accused product or process exactly or by a substantial equivalent.").

With respect to the invalidity of the '055 patent, this Court's task is simple; IPXL's expert disputes the presence of *only* the "single screen" limitation in the Coutts prior art patent— if Amazon shows the Court the presence of a "single screen" in Coutts, every one of the asserted claims falls. If Amazon shows the "single screen" limitation in Tarbox and Kelly, claims 1 and 9 are invalid in view of those prior art patents. Finally, Claim 25 is statutorily invalid.

---

<sup>1</sup> IPXL has not accused Amazon's system of infringement under the doctrine of equivalents. *See* May 28, 2004 Supplemental Answers to Amazon.com, Inc.'s First Set of Interrogatories to Plaintiff IPXL Holdings, LLC at 7, attached as Exhibit 4; Felten Infringement Report at 4, attached as Ex. 3; June 16, 2004 Deposition of Edward W. Felten at 174:8-176:11, attached as Ex. 5, and is precluded from doing so now. Therefore, Amazon need only show that there is no literal infringement for summary judgment to be granted.

**UNDISPUTED FACTS**

**I. THE ASSERTED CLAIMS OF THE '055 PATENT**

1. The '055 patent is titled "Electronic Fund Transfer or Transaction System" *See* Ex. 1, '055 patent.
2. The patent has 1 independent claim and 31 claims that are dependent from Claim 1. *See* Ex. 1, '055 patent.
3. IPXL asserts that Amazon infringes independent Claim 1 and dependent claims 2, 9, 15, and 25.<sup>2</sup> *See* Ex. 2; Ex. 3.
4. Claim 1, the independent claim, refers to "a system for processing financial transactions," which the patent specification makes plain "relates generally to electronic transaction network systems and more particularly to electronic fund transfer systems such as automated teller machines." *See* Ex. 1, '055 patent at 1:11-14.
5. The system of Claim 1 is designed to execute "a variety of activities that are or may be performed using an EFT ["electronic fund transfer"] system." *See* Ex. 1, '055 patent, Abstract, 5:38-39.

**II. AMAZON.COM AND AMAZON'S 1-CLICK® FEATURE**

This section describes Amazon's retail 1-Click® feature, the only aspect of Amazon's systems that is accused in the expert report on infringement proffered by IPXL's expert, Dr. Edward Felten (the "1-Click® Feature"). *See* Felten Infringement Report at 13-22, attached as Exhibit 3.

**A. Amazon's 1-Click® Feature Is Part Of A System For Placing Orders For Books And Other Goods On The Internet.**

6. Amazon's 1-Click® Feature is part of a system for placing orders for books and other goods on the Internet. Like any traditional catalogue-order company, Amazon only seeks payment for ordered goods if the order is fulfilled, and goods are sent to the customer. Declaration of Douglas Heimbürger ("Heimbürger Decl."), ¶¶ 2-3, attached as Ex. 13.
7. Using 1-Click®, an Amazon user can order an item once she has found the item on Amazon's website, and has enabled the 1-Click® Feature. *See* Ex. 9.
8. To begin the ordering process, a user must be on the Amazon.com website, which can be reached via the Internet by typing in the URL "www.amazon.com," *See* Ex. 7.

---

<sup>2</sup> The claim language for each asserted claim is set out in the attached Exhibit 6.

9. A user's personal computer communicates with Amazon's servers through the Internet. Information is transferred back and forth between the user's computer and Amazon's servers using the HTTP protocol. HTTP is a "stateless," or connectionless protocol that breaks messages down into a number of packets that are routed through the Internet by a process called packet-switching, which allows packets to be transmitted along different paths and arrive at various times—not necessarily in the same order as they were sent. *See* Declaration of Gene Pope ("Pope Decl."), ¶¶ 11-12, attached as Ex. 21.
10. Unless the item appears on the "Welcome" page for that user, the user must normally navigate through web pages to find the item. For example, the user may enter search terms into the keyword search box and click "Go!" to be taken to a search results page. *See* Ex. C to June 2, 2004 Expert Report of Donal O'Mahony, Ph.D., Regarding the Noninfringement By Amazon of United States Patent No. 6,149,055 ("O'Mahony Report"), attached as Ex. 8.
11. The user can then select one of the results from the search results page by clicking a link for that item. Alternatively, the user can use links on the "Welcome" page to browse lists of items. All of these actions will take the user to new web pages. When a user finds interesting item, she can click a link for that item, and be taken to the product detail page for that item. *See* Ex. D to O'Mahony Report, attached as Ex. 8; *see also* Ex. 9.
12. This product detail page contains more information about the item, including an estimate of how long it will take for the item to be available for shipment. If the user wants to order the item, she can place the order by either pushing the "1-Click®" button on this web page, or by selecting the "Add to Cart" option, which will add the order to the user's virtual "shopping cart" and allow the user to either continue browsing for items on the website, to leave the website entirely, or to proceed to checkout. Pushing the 1-Click® button to order a retail item from Amazon's inventory merely creates an order (or modifies an existing order by adding an item to it). In addition, after clicking the 1-Click® button, the user is taken to a new page. *See* Ex. K to O'Mahony Report, attached as Ex. 8; *see also* Ex. 9.
13. After the user orders with 1-Click® the order is not immediately acted upon, however. Instead, it is put in a holding state for at least 90 minutes. During the 90 minute holding period the user may add to, modify, or cancel the order freely. For example, the user can review or edit her 1-Click® orders, change address, ship method, payment, item quantities, add gift-wrap, or apply a gift certificate or promotional code to her order—all of which will change the amount the user will owe if the order is fulfilled. *See* Ex. K to O'Mahony Report, attached as Ex. 8; Ex. 12.
14. If the user makes any changes to the order, then the 90-minute holding period starts anew. An order can be in a holding state for an unlimited amount of time, and no financial transaction will occur. A user can also cancel each item selected using the 1-Click® button and end up with nothing in her order. If the user does this, then no payment is ever made or processed. *See* April 27, 2004 Deposition of Jennifer E. Loflin, at 236:4-18, attached as Ex. 10.

15. Additionally, if a user orders an item using 1-Click®, and within 90 minutes of that order, attempts to order that same item using 1-Click®, the item is only ordered once. The user's clicking on the 1-Click® button multiple times will be effectively ignored. *See* October 12, 2001 Deposition of Peri Hartman at 93:8-16, attached as Ex. 11.
16. Even after the 90-minute window has expired, up until the point that the order enters the "shipping soon" status, the order can still be modified, combined with other confirmed orders, or cancelled. *See* Ex. 12. Thus, in the case of out of stock items or pre-ordered items, for example, a user may actually have weeks or months to add to, cancel, or modify a 1-Click® order.
17. It is only after the order is finalized and shipped that Amazon seeks payment for the goods. *See* Heimburger Decl., ¶ 2, attached as Ex. 13.
18. Amazon does not seek payment until goods are about to be shipped because until shipping, the amount(s) to be charged to the customer is (are) not certain. Further, because Amazon seeks payment only when an item is about to be shipped, and because the items making up an order may ship separately from one another, Amazon may end up seeking numerous separate payments associated with a single order. *Id.*
19. Thus, there is no direct or constant correlation between the number of times an Amazon user pushes the 1-Click® button and the number of payments, if any, that Amazon will eventually seek. *Id.*
20. In his expert report, Dr. Felten ordered two separate items during his visit to Amazon.com, both of which he counted as separate "financial transactions." Yet his credit card bill reflects only a single transfer of funds from his bank to Amazon's bank. Felten Infringement Report at 15, 19, attached as Ex. 3; Felten 008, attached as Ex. 28.
21. Because Amazon is a retailer and not a bank, it does not itself process and settle the payments for the goods it has shipped. *See* Heimburger Decl. ¶ 2, attached as Ex. 13.
22. Instead, Amazon collects the credit card/debit card information and related order information that it receives and sends it in batches to third-party payment processors acting as acquiring banks, and those payment processors present the information to and settle the payment with the credit card/debit card associations. The payment processors thereafter remit the funds, less any applicable fees, to one of Amazon's depository banks. Heimburger Decl. ¶ 5, attached as Ex. 13.
23. Apart from sending the appropriate information to its designated payment processors, Amazon is not involved in the payment processing in any way, and would not, in fact, be able to be involved since it is not an acquiring bank. *Id.*
24. The "recommendations" displayed after a user clicks the 1-Click® button are not based on any stored data for that user. Instead, part of the HTTP request that is sent when a user clicks the 1-Click® button tells the system to look up and display a list of similar items. The list is based on the most popular items among other customers who also ordered the referent item.

**B. ATM Technology in the mid-1990's**

25. In the 1996 timeframe, branch ATMs were typically connected to a host central controller through the use of (usually proprietary) communication lines such as telephone lines. In each case, the ATMs were connected so that information being transmitted between the ATM and central controller flowed through a single, defined path.

**C. The Gatto '055 Patent**

26. The application that issued as the '055 patent was filed on June 26, 1996 and is a continuation in part application of an application filed on April 13, 1995. The '055 patent issued on November 21, 2000. Ex. 1.
27. Other than uncorroborated inventor testimony, there is no evidence of record that supports an invention date of the inventions claimed in Claim 1 prior to the filing date of the '055 patent application. See Ex. 29, May 18, 2004 IPXL's Second Supp. Resp. to Amazon's 1st Set of Interrog. at 3; Ex. 14, April 28 Gatto Tr. at 8:25-10:19.
28. Amazon first became aware of the '055 patent in March 2002, after receiving a letter from James Gatto. After becoming aware of the '055 patent, Amazon obtained and relied upon opinion of counsel. Ex. 23, April 21 Amazon's Resp. 1<sup>st</sup> Set Interrog. at 1-2.

**D. The Prior Art Patents**

29. The application that issued as the Tarbox patent was filed on December 16, 1994 and issued on January 6, 1998. See Ex. 15, U.S. Patent No. 5,705,798.
30. Tarbox was cited in an Information Disclosure Statement ("IDS") filed by the applicant, Mr. James Gatto, on May 4, 2000, more than three months *after* the PTO mailed a Notice of Allowability of the '055 patent application. See Ex. 16, IPXL 00116-00118.
31. Tarbox was cited to Mr. Gatto in a European Search Report for a related application dated February 22, 1999, more than a year *prior* to being disclosed to the PTO on May 4, 2000. See Ex. 17, IPXL 00119-00121.
32. The application that issued as the Coutts patent was filed on November 15, 1993 and issued on February 14, 1995. See Ex. 18, U.S. Patent No. 5,389,773.
33. Coutts was cited in an IDS filed on November 22, 1996. See Ex. 19, IPXL 00078-00082.
34. The Kelly patent issued on May 15, 1984. See Ex. 20, U.S. Patent No. 4,449,186.

**LEGAL STANDARDS**

**A. Summary Judgment**



Summary judgment is appropriate where “there is no genuine issue as to any material fact” and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Phillips v. AWH Corp.*, 363 F.3d 1207, 1211 (Fed. Cir. 2004). This Court must view the evidence in the light most favorable to IPXL, which must do more than merely raise some doubt as to the existence of a fact for that fact to be in genuine dispute; it must present evidence sufficient to require submission of the fact to the jury. *Avia Group Int’l, Inc. v. L.A. Gear California, Inc.*, 853 F.2d 1557, 1560 (Fed. Cir. 1988) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249-50 (1986)).

#### **B. Noninfringement**

To prove infringement, IPXL must prove that each and every limitation of the asserted claims is found in the accused product. *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1345-46, 1357 (Fed. Cir. 2002) (reversing finding of infringement; court failed to compare each claim limitation to the corresponding element of the accused products); *Desper Prods., Inc. v. QSound Labs, Inc.*, 157 F.3d 1325, 1337-38 (Fed. Cir. 1998) (affirming summary judgment of noninfringement affirmed claim element missing from accused devices). Literal infringement, which is all that IPXL has alleged, requires that the accused device contain each limitation of the claim exactly; any deviation precludes a finding of literal infringement. *See TechSearch, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1371 (Fed. Cir. 2002).

#### **C. Invalidity**

Anticipation is found where each and every element of a claim is found, either expressly or inherently, in a single prior art reference. *See Dayco Prods. Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (“the dispositive question regarding anticipation [i]s whether *one skilled in the art* would reasonably understand or infer from the [prior art reference’s] teaching that every claim element was disclosed in that single reference”). A patent

is presumed valid, and Amazon must prove invalidity by clear and convincing evidence. *See University of Rochester v. G.D. Searle & Co., Inc.*, 358 F.3d 916, 920 (Fed. Cir. 2004) The clear and convincing standard does not shift depending on whether a piece of prior art was cited during prosecution of a patent at issue. *See Abbott Labs. v. Syntron Bioresearch Inc.*, 334 F.3d 1343, 1357 (Fed. Cir. 2003) (“presumption of validity remains the same whether or not the art relied upon at trial was before the examiner”). Where a party shows by clear and convincing evidence that the asserted claims are invalid as anticipated in view of particular prior art references, the fact that those prior art references was disclosed to the PTO does not prevent a finding of invalidity. *See e.g., Udin v. J.Kaufman Iron Works, Inc.*, 342 F. Supp. 1090, 1100-01 (S.D.N.Y. 1972)

### III. ARGUMENT

No reasonable jury could find that Amazon’s 1-Click® Feature, a feature for placing orders for goods over the Internet, contains each and every element of the asserted claims of the ’055 patent, which relate to the electronic execution of financial transactions. Specifically Amazon’s 1-Click® Feature:

- is not an “electronic financial transaction system”;
- does not execute “financial transactions”
- allows no selection of “transaction types”
- does not present a “plurality of transaction parameters”
- does not contain “a terminal device selectively connectable to the central controller through the communications network”
- does not contain “means for storing user-defined transaction information, the transaction information comprising at least one of user-defined transactions and user-defined transaction parameters”
- does not “display on a single screen stored transaction information”
- does not “enabl[e] a user to use the displayed transaction information to execute a financial transaction or to enter selections to specify one or more transaction parameters”
- does not “predict[] transaction information that a user of the terminal will desire based on stored data for that user”; and

- does not contain “means for identifying a user prior to enabling the user to execute a transaction.”

Amazon’s 1-Click® Feature is missing virtually *every* limitation of the claims of the ’055 patent; this Court must grant summary judgment if it finds even a *single* limitation missing. The asserted claims are also invalid in view of Coutts, Tarbox, and Kelly, and Claim 25 is statutorily invalid.

**IV. AMAZON’S 1-CLICK® FEATURE DOES NOT LITERALLY MEET THE LIMITATIONS OF CLAIM 1 OF THE ’055 PATENT.**

Amazon’s 1-Click® Feature fails to meet each and every limitation of Claim 1, applying either Amazon’s or IPXL’s proposed constructions of this claim.

**A. Amazon’s 1-Click Feature Is Not “An Electronic Financial Transaction System For Executing Financial Transactions.”**

**1. Amazon’s 1-Click® Feature is Not an “Electronic Financial Transaction System.”**

Amazon’s 1-Click® Feature is not an “electronic financial transaction system,” nor is it part of any such system. The ’055 patent explicitly defines the term “transaction” as “intended to broadly describe a wide variety of activities that are or may be performed using an EFT<sup>3</sup> system.” Ex. 1, ’055 patent, 5:37-39. Thus, since the term “transaction” as used in the patent means one of the activities that can be performed using an “EFT (“electronic fund transfer”) System,” the “electronic financial transaction system” of Claim 1 must be such an EFT (electronic funds transfer) system.

There is no genuine dispute of material fact that Amazon’s 1-Click® Feature is not either by itself, or in conjunction with any other Amazon system, an EFT system. The meaning of the

---

<sup>3</sup> The ’055 patent explicitly defines “EFT” to mean “electronic fund transfer.” Ex. 1, ’055 patent, Abstract.

term EFT system is well-known (and defined by federal law), as explained in Amazon's claim construction brief. The Electronic Fund Transfer Act, 15 U.S.C. 1693a, defines EFT as follows:

(6) the term "electronic fund transfer" means any transfer of funds, other than a transaction originated by check, draft, or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument, or computer or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit an account. Such term includes, but is not limited to, point-of-sale transfers, automated teller machine transactions, direct deposits or withdrawals of funds, and transfers initiated by telephone.

Amazon's 1-Click® Feature is not such an EFT system. Amazon's 1-Click® Feature is a feature for placing orders for goods. Amazon's 1-Click® Feature does not provide for the "transfer of funds . . . which is initiated through an electronic terminal . . . or computer . . . so as to order, instruct, or authorize a financial institution to debit or credit an account." In fact, Amazon is even further removed from EFT systems than are "brick and mortar" retail stores, which may well have point-of-sale ("POS") terminals in the store that customers can use to pay for purchases. Amazon has nothing like that, but instead passes on payment requests to its third-party payment processors, similar to a mail order house. Heimburger Decl. ¶¶ 2, 4, attached as Ex. 13.

Further, unlike EFT systems, which immediately execute EFTs according to a user's instructions, as set forth in its Conditions of Use, no matter what order a customer places using 1-Click®, Amazon may not accept the user's order; it often refuses to accept orders where there is a suspicion of credit card fraud, or a history of fraudulent transactions by the customer placing the order. See Loflin Deposition at 77:23-78:12, attached as Ex. 10. Moreover, even if Amazon wants to accept an order, there are times (e.g., when an item is out of stock and cannot be obtained) when Amazon simply cannot fulfill the order, in which case Amazon never requests payment for that order. Thus, a 1-Click® order does not obligate Amazon to request that the

customer's credit card be charged for an order; Amazon never makes such a request if it either will not or cannot fulfill the order.

This is a far cry from the obligations that attach to financial institutions and financial services companies executing EFTs under the EFT Act. In Amazon's case, customers use 1-Click® to place orders that Amazon can choose to fulfill or not with no legal consequence to Amazon. In the case of an EFT system, if a customer uses the EFT system to instruct a financial institution to transfer funds, the fund transfer is executed—the EFT has no choice, and may be held liable under 15 U.S.C. § 1693h if it does not promptly effect the instructed fund transfer.

**2. Amazon's 1-Click® Feature Is Not a System for "Executing Financial Transactions."**

Amazon's 1-Click® feature is used only to order goods, not for "executing financial transactions." The differences between 1-Click® orders and EFT executions are manifest. Using 1-Click®, an Amazon customer can order an item. No fund transfer, or financial transaction, is executed by clicking the 1-Click®, however. Instead, pushing the 1-Click® button creates a new order or modifies an existing order for products, *which is put in a holding state for at least 90 minutes*. See *supra* II.A., ¶ 13-14. During that 90-minute holding period the customer may add to, modify, or cancel the order; each change starts the 90-minute holding period starts anew. Further, if a user orders the same item using 1-Click® within that 90-minute holding period, the item is only ordered once. That is, the user's clicking on the 1-Click® button multiple times will be effectively ignored. Additionally, the order can continue to be changed or cancelled up until the point that the order enters the "shipping soon" status. See *supra* II.A., ¶ 15-16.

Once the order is finalized and the goods making up the order are shipped, Amazon's system is done processing the order. Then and only then do fund transfers occur. In an entirely

separate transaction, Amazon sends credit card information and amounts to be charged in batches to one of its several third-party payment processors, who actually execute financial transactions to charge customers' cards. *See supra* II.A., ¶ 21-23. Moreover, because Amazon only seeks payment once the item is shipped, and because the items making up an order may ship separately from one another, there may end up being numerous charges associated with a single order. *See supra* II.A., ¶ 18. Thus, there is no direct or constant correlation between the number of times a consumer uses 1-Click® and the number of financial transactions, if any, that eventually will be carried out. Heimburger Decl. ¶ 5, attached as Ex. 13.

For the same reasons, the 1-Click® Feature does not infringe even this Court adopts IPXL's definition. IPXL defines this claim term as "any financial transaction performed electronically" and gives a list of examples of financial transactions. Each of the examples given by IPXL are for electronic fund transfers, none relate to placing orders. Even the example that IPXL relies on extensively—*paying* for the purchase of goods or services—proves Amazon's point. It could not be more clear that selecting or ordering goods as part of a purchase is separate and apart from paying for the purchase of the goods. 1-Click® is used to select the goods for purchase. Paying for the purchase of the goods is handled by a third party if and when Amazon fills the order and ships the goods, which may happen days, if not weeks, after the order is placed, or never at all.

In sum, Amazon's 1-Click® Feature is not a system for executing financial transactions, nor does it allow users to execute financial transactions. Amazon does not meet this claim limitation and this Court should grant summary judgment of noninfringement.

**B. Amazon's 1-Click® Feature Does Not Meet the Limitation "The Transactions Being Characterized By a Transaction Type and a Plurality of Transaction Parameters."**

**1. There Are No Types of Transaction.**

1-Click® ordering does not allow the execution of different *types* of financial transactions. Under both Amazon's and IPXL's constructions, not only does 1-Click® ordering not have a plurality of transaction types, but the one function performed—placing orders—is not and does not involve a transaction type.<sup>4</sup>

Under Amazon's definition, a "transaction type" is "an account balance inquiry or kind or type of asset transfer that is selected as part of a financial transaction." IPXL's definition specifies that a "transaction type" can be "any type of financial transaction," and as discussed above, IPXL's definition of "financial transaction" is a series of examples, each of which example involves the transfer of funds (or balance inquiry). Obviously the mere clicking on the 1-Click® button to place an order does not involve a balance inquiry or funds transfer, as has been explained above, but instead simply places conditional order (since it may be freely cancelled or modified in at least the next 90 minutes). *See infra* II.A., ¶ 13-14. Under either construction there are no "transaction types."

## 2. There Is No "Plurality of Transaction Parameters."

If this Court adopts Amazon's construction of "transaction parameters," Amazon's 1-Click® Feature does not meet this limitation for additional reasons. Amazon's construction limits a "transaction parameter" to "information necessary to define a given financial transaction." "Financial transactions" are activities performed by an electronic fund transfer system, including fund transfers or balance inquiries. Thus, the only transaction parameter associated with an order placed as a result of clicking Amazon's 1-Click® button is the credit card information that will be used if the order is fulfilled; there is no "plurality" of transaction parameters from which to select. Other types of customer information such as product choice,

---

<sup>4</sup> *See* Ex. 31.

shipping address, and speed of shipping are not associated with a fund transfer and are not *transaction* parameters. Amazon does not meet this claim limitation and this Court should independently grant summary judgment of noninfringement.

**C. Amazon's 1-Click® Feature Does Not Meet the Limitation "A Terminal Device Selectively Connectable to the Central Controller Through The Communications Network."**

If this Court adopts Amazon's construction,<sup>5</sup> Amazon's 1-Click® Feature does not meet this limitation. Amazon's definition requires a single defined, dedicated, path is maintained for the duration of the transmission. This is not the case with the Internet, which is a connectionless system without such a single defined, dedicated, path of communication. *See* Declaration of Gene Pope, ¶¶ 11-12, attached as Ex. 21.

The Internet is a public medium created by the combined systems of many public and private entities. *See generally Reno v. ACLU*, 521 U.S. 844, 849-854 (1997) (description of the Internet). Unlike an ATM network, in which data flows only through a private, single-path, network data transmitted via the Internet travels along diverse and changing paths unknown to the user and owned by many different entities. *See* Lichstein Decl., ¶¶ 2-4, attached as Ex. 30; Pope Decl. ¶¶ 11-13, attached as Ex. 21. Customers placing orders on Amazon's website clearly do not have a single defined, dedicated, path to Amazon's central controller that is maintained for the duration of the transmission. Rather, HTTP protocol is a "stateless," or connectionless, protocol system; the path changes from one second to the next, with packet-switched data transmitted back and forth along numerous different routes, resulting in the data sometimes arriving at the destination computer out of order. *See id.* In addition, both the PC and the host server communicating via the Internet are "intelligent" when it comes to addressing where the

---

<sup>5</sup> *See* Ex. 31.



packet-switched data they are sending should go. *See* O'Mahony Report at 12, attached as Ex. 8. This is completely different from the world of ATM systems at the time of the '055 patent invention. In ATM systems, only the central controller or terminal controller selects which terminal to connect with the central controller in order to communicate information. *See* Lichstein Decl. ¶ 2-31, attached at Ex. 30. The terminals have no independent ability to determine when they communicate, nor do they exercise control over where their data is sent—it all passes through a single defined, dedicated, path to the Central Controller. *Id.* at ¶ 2-5. Because of the way the Internet functions, Amazon's system does not infringe, and this Court should grant summary judgment.

**D. Amazon's 1-Click® Feature Does Not Meet The Limitation “Means For Storing User-defined Transaction Information, the Transaction Information Comprising At Least One of User-defined Transactions and User-defined Transaction Parameters.”**

**1. There is no “Means For Storing User-defined Transaction Information, the Transaction Information Comprising At Least One of User-defined Transactions and User-defined Transaction-Parameters.”**

If this Court adopts Amazon's definition of “means for storing user-defined transactions,” the 1-Click® Feature does not infringe.<sup>6</sup> First, as set out in Amazon's claim construction brief at 17-20, under Amazon's construction the only means for storing user defined transaction information that is covered by the claims is a user card. Because no user card is used to order with 1-Click®, this limitation cannot be infringed under Amazon's construction.

Second, Amazon further defines this claim limitation as requiring the system to store at least one user-defined transaction (which is comprised of both a user-defined transaction type

---

<sup>6</sup> *See* Ex 31.

and a plurality of user-defined transaction parameters), *and* at least one additional user-defined transaction parameter.

As explained earlier, Amazon does not store transaction types—and certainly does not store *user defined* transaction types. The only function accused by IPXL in Amazon’s system is the ordering of products using the 1-Click® Feature, *see* Ex. 3 at 13-22, which involves no transaction type.

Even if one were to view the ordering of products with 1-Click® to be a “transaction type,” there would still be *only a single* transaction type. Because a customer ordering with 1-Click® is simply placing orders for products, Amazon’s system doesn’t have a way to store different “types” of transactions—there are no other types.

Thus, Amazon does not meet this claim limitation and this Court should grant summary judgment.

**E. Amazon’s 1-Click® Feature Does Not Meet The Limitation “Display on a Single Screen Stored Transaction Information.”**

Amazon’s 1-Click® Feature does not meet the “single screen” limitation under either proposed construction.<sup>7</sup> There is no infringement if one applies IPXL’s construction because a user who ultimately orders using 1-Click must navigate through one or more web pages in order to find and select the item that she would like to order. *See supra*, II.A., ¶ 7-10. Indeed, according to IPXL’s constructions, because IPXL suggests that the name of an item is a “transaction parameter,” then in order to reach the product detail page, where the user may choose to order the product using the 1-Click® feature, the user must “first endur[e] a series of transaction entry screens,” which does not meet the claim limitation as construed by IPXL. Amazon’s 1-Click® Feature therefore fails to meet the “single screen” limitation and does not

---

<sup>7</sup> *See* Ex 31.

infringe this claim. This Court should grant summary judgment of noninfringement on this ground.

Applying Amazon's proposed construction this limitation is not met because Amazon's system does not display stored "transaction information." As explained supra section IV.B.1. Amazon's system does not store—and therefore cannot display—a transaction type. In addition, under Amazon's definition of "transaction parameters," Amazon's system does not display user-defined parameters associated with any financial transaction, as explained supra section IV.B.2. Amazon does not meet this claim limitation and this Court should grant summary judgment.

**F. Amazon's 1-Click® Feature Does Not Meet The Limitation "Enabling a User to Use the Displayed Transaction Information to Execute a Financial Transaction or to Enter Selections to Specify One or More Transaction Parameters"**

Under both parties' definitions, this claim limitation requires display of transaction information sufficient to allow the user to choose between executing a user-defined financial transaction or specifying one or more transaction parameters.<sup>8</sup> Because of this requirement, Amazon's 1-Click® Feature does not infringe this limitation.

*First*, there is no display of transaction information that allows the user to execute a user-defined financial transaction. As explained above, Amazon's 1-Click® Feature does not display on a single screen transaction information, nor does it display parameters related to a financial transaction.

*In addition*, Amazon's 1-Click® Feature does not "execute" a financial transaction under either Amazon's or IPXL's constructions of that term. Amazon defines "execute" as "carry out fully" or "put completely into effect." IPXL defines "execute" as "to cause to carry out or perform the transaction 'without the need for further inputs or selections by the user.'"

---

<sup>8</sup> See Ex. 31.

Amazon's 1-Click® Feature is part of a system for placing orders for goods on the Internet. By clicking the 1-Click® button, a user submits an order which may or may not result in a financial transaction somewhere down the line. The user does not (and cannot) complete a financial transaction by instructing the EFT system to commence a transfer of funds (or balance query). Nor does (or can) the user cause to carry out or perform the transaction without the need for further inputs or selections by the user. As explained above, many things can happen before a financial transaction takes place, if it takes place at all.

*Further*, to execute a financial transaction under either Amazon's or IPXL's definition, the dollar amount of the financial transaction must be known and set. Because a user can add new 1-Click® orders within 90 minutes of the latest modification to the order, there is no way to know what the final amount that will be charged to the credit card will be until the order is fulfilled. And, of course, the order might never be fulfilled if, for instance, Amazon chooses not to fulfill it or if the product ordered is not available. Additionally, changing the shipping method, changing item quantities, adding gift wrap, or applying a gift certificate or a promotional code to the order all will also change the amount to be charged to the credit card if the order is fulfilled.

If this Court adopts Amazon's construction, there is no display of transaction information that allows the user to specify one or more transaction parameters. As explained in detail above, Amazon's 1-Click® feature does not display on a single screen transaction information, nor does it display parameters related to a financial transaction on such a single screen. Hence, there is no way for a user to use such displayed transaction information to specify one or more transaction parameters. Using 1-Click® ordering, a user cannot specify any financial transaction parameters at all. For example, a user cannot directly select the credit card to be used from the "ship to"

dropdown menu. Instead, a user may only select an address from the dropdown menu to which the product is to be shipped.

For all of these reasons Amazon's 1-Click® Feature does not meet this limitation, and this Court should grant summary judgment.

**V. AMAZON'S 1-CLICK® FEATURE DOES NOT LITERALLY MEET THE LIMITATIONS OF CLAIM 2 OF THE '055 PATENT.**

Claim 2 is dependent on Claim 1. Accordingly, it is not infringed if all of the limitations of Claim 1 are not met. Because 1-Click® does not meet all the limitations of Claim 1, Claim 2 is not infringed. In addition, Amazon's 1-Click® Feature does not meet Claim 2's added limitation—"predicts transaction information that a user of the terminal will desire based on stored data for that user."

**A. Amazon's 1-Click® Feature Does Not Meet the Limitation "Predicts Transaction Information That a User of the Terminal Will Desire Based on Stored Data for that User."**

IPXL's expert, Dr. Felten, offers only one example of infringement of this Claim: "1-Click® Thank You pages, as illustrated in Appendices 15 and 16, . . . offer the user 1-Click® Ordering of items based on stored information about what the user has ordered previously." *See* Ex. 3, Felten Report at 20, Appendices 15, 16. Amazon's 1-Click® Feature does not meet this limitation under either Amazon's or IPXL's construction.

*First*, under Amazon's and IPXL's construction,<sup>9</sup> Amazon's 1-Click® Feature does not foretell transaction information to display to a user based upon data stored by that user for repeated use in future transactions. As discussed above, Amazon's 1-Click® Feature stores only one kind of financial transaction parameter -- credit card information. Amazon's system does not predict which credit card information to use with which 1-Click® purchase. Instead, this has

---

<sup>9</sup> *See* Ex. 31.

been set as a default for each shipping address and no prediction related is needed or done. Ex. 26, Felten Tr. at 522:11-20 (defaults not predictions under IPXL's definition).

*Second*, even under IPXL's broader definition, Amazon's "recommendations" are not predictions "based at least in part on stored data associated with that user." The "recommendations" shown in Appendices 15 and 16 to Dr. Felten's report are not based on stored user data. Instead, the clicking of the 1-Click® button, while simultaneously constructing an order and storing it in a holding state, acts like clicking on an "Explore Similar Items" link and returns a list of most similar items among other customers who have 1-Clicked the same item, such as the lists shown in Appendices 15 and 16 to Dr. Felten's report. This process involves no use or reference of stored data for the user who has just clicked the 1-Click® button. *See* Pope Decl., ¶ 5, attached as Ex. 21.

*Finally*, for any 1-Click® orders made from the similar items lists shown in Dr. Felten's Report, the user not only cannot "enter selections to specify one or more transaction parameters," but the drop-down menu that allows a user to select from a plurality of shipping addresses on a product detail page is not present either. Thus, even under IPXL's strained claim construction in which IPXL tries to make the ability to select from a plurality of shipping addresses relevant, there is no ability to choose from such shipping addresses in ordering from among similar items lists such as the ones shown in Dr. Felten's Report. To the extent that gift wrap constitutes a parameter, it is a parameter of the order and not of a financial transaction. Moreover, clicking the "Add gift-wrap/note" box does not actually select the gift wrap parameter associated with the order. Instead, once a user clicks the "Add gift-wrap/note" box, the user is directed to a new page. It is on this new page that the user is able to enter a gift message and/or select gift wrap. Thus, Amazon's 1-Click® Feature cannot infringe Claim 2.

**VI. AMAZON'S 1-CLICK® FEATURE DOES NOT LITERALLY MEET THE LIMITATIONS OF CLAIM 9 OF THE '055 PATENT**

Claim 9 is dependent on Claim 1. Accordingly, it is not infringed since all of the limitations of Claim 1 are not present. Amazon's 1-Click® Feature meet Claim 9's added limitation "means for identifying a user prior to enabling the user to execute a transaction."

**A. Amazon's 1-Click® Feature Does Not Meet The Limitation "Means for Identifying a User Prior to Enabling the User to Execute a Transaction."**

This element is not infringed under either Amazon's or IPXL's definitions because Amazon's 1-Click® Feature does not have means for identifying the user prior to enabling the user to execute a transaction. Instead, Amazon merely infers who the customer placing the 1-Click® order is by identifying the browser the customer is currently using. Amazon identifies the browser by placing a unique browser ID in a cookie file on the user's computer. Thereafter, each time the browser visits the Amazon site, it is identified to Amazon. The unique browser ID can be associated with a plurality of unique customer IDs (because a number of people may use the same browser to order with Amazon). When a 1-Click® order is received, Amazon's system looks up the unique browser ID and infers that the customer placing the order is the one who most recently logged on to the system. Amazon knows that this inference may be completely wrong, but accepts that so as to speed the ordering process and avoid sign-on pages for 1-Click® ordering. *See* May 25, 2004 Deposition of N. Peri Hartman at 1:10-191:6, attached as Ex. 22.

Not only does the Amazon system not have means for identifying a user prior to enabling the user to place a 1-Click® order, but the structure that Amazon uses to identify the *browser* is a cookie and neither it, nor its equivalent is disclosed in the '055 patent. Because Amazon's 1-Click® Feature lacks both the means and the structure of this limitation, Amazon's 1-Click® Feature cannot infringe Claim 9.

**VII. AMAZON'S 1-CLICK® FEATURE DOES NOT LITERALLY MEET THE LIMITATIONS OF CLAIM 15 OF THE '055 PATENT.**

Claim 15 is dependent on Claims 1 and 9. In addition to the above reasons why Amazon's 1-Click® Feature does not infringe claim 15 for the additional reason that it does not predict transaction information the user will desire, as explained above in the discussion of Claim 2.

**VIII. AMAZON'S 1-CLICK® FEATURE DOES NOT LITERALLY MEET THE LIMITATIONS OF CLAIM 25 OF THE '055 PATENT.**

Claim 25 is dependent on Claims 1 and 2. Because all of the limitations of claims 1 and 2 are not met, Claim 25 cannot be infringed.

**IX. DUE TO THE MANNER IN WHICH 1-CLICK® ORDERING OCCURS, AMAZON CANNOT INFRINGE THE '055 PATENT.**

**A. Amazon Does Not Directly Infringe the '055 Patent For Additional Reasons.**

Infringement of a patent under 35 U.S.C. § 271(a) "cannot be interpreted to cover acts other than an actual making, using or selling of the patented invention." *Lang v. Pacific Marine and Supply Co., Ltd.*, 895 F.2d 761, 765 (Fed. Cir. 1990). Where, as here, a party does not make, use, offer to sell or sell a system comprising of each of the elements of an asserted claim, it cannot be held liable as a direct infringer under §271(a). *See Rotec Industries., Inc. v. Mitsubishi Corp.*, 215 F.3d 1246, 1252 n. 2 (Fed. Cir. 2000) ("one may not be held liable under § 271(a) for 'making' or 'selling' less than a complete invention").

Amazon does not make, use, offer to sell or sell any system that comprises all the elements of Claim 1. *First*, Amazon does not install or set up the personal computers used by its customers, or the memory, displays, or input devices associated with these computers. *See Ex. 21, Pope Dec. ¶ 5.* Rather, these components are introduced into the accused system by Amazon's customers at various times. Amazon therefore does not "make" the entire accused



system. *Second*, Amazon does not use or operate its customer's computers, and in particular, Amazon does not interact with or use the input devices used by its customers in any way. *See* Ex. 21, Pope Dec. ¶ 6. For this reason, Amazon cannot be liable for "using" all of the claimed elements of the accused system. *Third*, Amazon does not sell or offer to sell a system that contains each of the required elements. Rather, Amazon only allows customers to order goods through its website. *See* Ex. 21 Pope Dec. ¶ 9. Thus, summary judgment of no direct infringement should be granted.

#### **B. Amazon Cannot Be Liable For Indirect Infringement.**

Liability for inducement requires proof "that defendant's 'actions induced infringing acts and that [they] knew or should have known [their] actions would induce actual infringement.'" *See e.g. Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1363 (Fed. Cir. 2003); *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990). The Federal Circuit has specifically held that "'knowledge of the acts alleged to constitute infringement' is not enough," *Warner*, 316 F.3d at 1363, and rejected "a less stringent test for inducement liability, requiring that the officer be aware only of his activities, not necessarily aware that his activities amounted to infringement," *Ferguson Bearegard/Logic Controls v. Mega Sys.*, 350 F.3d 1327, 1342 (Fed. Cir. 2003)<sup>10</sup>. This Court likewise requires "an inducer's actual intent to cause the acts which 'he

---

<sup>10</sup> The holding in *Hewlett-Packard v. Bausch & Lomb*, 909 F.2d 1464, 1469 (Fed. Cir. 1990), requiring "proof of actual intent to cause the acts which constitute the infringement," does not exclude the need for knowledge of actual infringement, and is consistent with the *Manville* line of cases. Liability for inducement requires that a defendant *both* "knew or should have known [their] actions would induce actual infringement," and had "intent to cause the acts which constitute the infringement." *See Warner*, 316 F.3d at 1363. While *knowledge* of actual infringement is required, the higher level of *intent* is needed only for the underlying acts resulting in infringement. *See Moba, B.V. v. Diamond Automation*, 325 F.3d 1306, 1318 (Fed. Cir. 2003) ("the only intent required of FPS is the intent to cause the acts that constitute infringement"). This Court also requires both elements -- "an inducer's actual *intent to cause the acts* which 'he *knew or should have known would induce actual infringements.*'" *Black & Decker*, 953 F. Supp. at 138 (emphasis added).

knew or should have known would induce actual infringements.” *Black & Decker Inc. v. Catalina Lighting*, 953 F.Supp. 134, 138, (E.D. Va. 1997).

Amazon did not have knowledge of any alleged infringement prior to March 2002, when it first was made aware of the ‘055 Patent. *See* Ex. 23, Amazon’s April 21 Interrogatory Responses, at 2. Thus, Amazon cannot be held liable for inducing infringement before March 2002. *See Manville*, 917 F.2d at 553 (defendant cannot be liable for inducement before it knew of the patent). After becoming aware of the ‘055 Patent, Amazon obtained and relied upon the opinion of its counsel that the ‘055 Patent was invalid and not infringed. *See* Ex. 23, Amazon’s April 21 Interrogatory Responses, at 1-2. *See Manville*, 917 F.2d at 553 (reliance upon opinion of counsel negates knowledge of infringement). Moreover, IPXL has not alleged, or offered evidence, that Amazon had knowledge of infringement. Thus, Amazon should be granted summary judgment of no indirect infringement.

#### **X. THE ASSERTED CLAIMS ARE INVALID.**

Regardless of the claim construction this Court adopts, no genuine issue of material fact exists that all of the asserted claims of the ‘055 patent are invalid, and this Court should therefore grant summary judgment of invalidity.

##### **A. The Prior Art Patents**

###### **1. The Coutts patent is invalidating prior art.**

The Coutts patent, “Self-service system having transaction predictive capability and method of using,” describes an ATM system that predicts “which service or services provided by the system the user is likely to request.” *See* Ex. 18 at Abstract. Coutts discloses that the predictions are based upon “a stored record in the system, representing previous transactions by that user.” *See Id.* Coutts also discloses a “special display for a particular user, the display being designed to simplify the decisions and selections required to be made by that user” to reduce the

number of decisions and selections a user must make to complete a transaction. *See Id.* at Abstract; 1:21-33.

The Coutts patent is prior art under 35 U.S.C. §102 (a), (b) and (e). The Coutts patent issued on February 14, 1995, prior to the earliest invention date of the invention claimed in the '055 patent, June 26, 1996. There is no evidence of record that raises a genuine issue of material fact that the invention claimed in Claim 1 was invented prior to the filing date of the '055 patent application.<sup>11</sup> Therefore, Coutts is prior art under 35 U.S.C. §102(a) because it issued before the invention of the '055 patent. Because Coutts issued more than one year before the June 26, 1996 filing date of the '055 patent, it is also prior art under § 102(b).<sup>12</sup> Coutts is also prior art under 35 U.S.C. §102(e) because the Coutts application was filed prior to the invention date of the '055 patent and issued to another.

## **2. The Tarbox patent is invalidating prior art.**

The Tarbox patent, entitled, "System and method for processing a customized financial transaction card" teaches a system and method for conducting financial transactions using a financial card that stores pre-selected transaction instructions and a transaction terminal, such as

---

<sup>11</sup> The only evidence IPXL could possibly rely upon to establish an earlier date is the uncorroborated testimony of its inventor. Ex. 14, April 28 Gatto Tr. at 8:25-10:19. As a matter of law, the uncorroborated testimony of an inventor is insufficient to establish an invention date. *See Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993) (recognizing that it is well-established that a party claiming his own prior inventorship must proffer evidence corroborating his testimony); *Singh v. Brake*, 222 F.3d 1362, 1367 (Fed Cir. 2000) ("This rule addresses the concern that a party claiming inventorship might be tempted to describe his actions in an unjustifiably self-serving manner in order to obtain a patent or to maintain an existing patent."). Accordingly, no reasonable jury could find an invention date earlier than that of the filing date of the '055 patent.

<sup>12</sup> In fact, even if given the benefit of the priority date of its parent application's filing date (April 13, 1995), Coutts would still be prior art under 102(a) because Coutts was filed approximately two months prior to that priority date.

an ATM, to run pre-selected and pre-stored financial transactions (such as withdrawals and bill payments) when the financial card is placed in the terminal. *See* Ex. 15 at Abstract; 1:11-29.

The application that issued as the '055 patent was filed on June 26, 1996 and is a continuation-in-part application of an application filed on April 13, 1995. *Id.* As discussed above, IPXL cannot prove an invention date earlier than that of the filing date of the '055 patent, June 23, 1996. Because the application leading to the Tarbox patent was filed approximately 19 months prior to the filing date of the '055 patent and issued as a patent, Tarbox is prior art under 35 U.S.C. §102(e).

**3. The Kelly patent is invalidating prior art.**

The Kelly patent entitled, "Touch Panel Passenger Self-Ticketing System" issued on May 15, 1984. *See* Ex. 20. Kelly describes a system for vending airline tickets to credit card purchasers based upon stored reservation data for each purchaser. *See* Ex. 20 at Abstract. For the same reasons discussed above, Kelly is prior art to the '055 patent under §102(a), (b) and (e).

**B. The Single Screen Limitation**

Claim 1 contains the following limitation, which the parties have referred to as the "single screen" limitation:

**Claim 1: "Single Screen" Limitation: the processor causing the display to display on a single screen stored transaction information; the input mechanism enabling a user to use the displayed transaction information to execute a financial transaction or to enter selections to specify one or more transaction parameters.**

Under Amazon's proposed construction, the single screen limitation requires that a system display stored user-defined transaction information comprising a user-defined transaction type and a plurality of user-defined transaction parameters with additional user-defined transaction parameters on a single screen from which a user is given both options of executing a transaction and specifying parameters.

IPXL's proposed construction requires that a system display on a single screen user-defined transaction information comprised of *any* stored information related to a transaction that was not preceded by any transaction entry screen(s) from which a user may either execute a transaction, specify parameter(s), or both. In other words, under IPXL's proposed construction, the system of Claim 1 may allow a user to only execute a transaction or only specify parameters, or both and still satisfy this limitation. IPXL's construction reads out any system that contains screen preceding the single screen irrespective of whether the preceding screen is navigational, i.e., allowing a user to enter a selection that leads to a single screen that displays the claimed stored transaction information.

**C. The Prior Art Patents Each Contain the Single Screen Limitation of Claim 1.**

Under either Amazon's or IPXL's proposed constructions, Coutts and Tarbox each contain the single screen limitation of Claim 1. Under IPXL's proposed construction, Kelly contains the single screen limitation.

**1. Coutts Teaches the "Single Screen" Limitation Under Either Amazon's or IPXL's Proposed Constructions.**

Coutts teaches the display of user-defined transaction information on a single screen that enables a user to execute the transaction or enter selections to specify parameters as required under Amazon's construction, which necessarily satisfies IPXL's broader construction. *See* Ex. 24, Expert Report of Henry Lichstein at 28-29. Coutts discloses that a user initiates a transaction by inserting an identification card into a card reader of the ATM. Ex. 18 at Abstract; 3:62-65. Upon insertion of the card, an authorization process is started and the user is prompted to enter a user specific PIN. *Id.* at 3:65-68. The Coutts system begins the prediction process at that time. *Id.* at 4:1-6; Fig. 3. After the system makes a prediction, "the predictive system 38 determines what is the most appropriate menu interface for the user and causes this menu to be displayed on

the display screen 18.” *Id.* at 4:15-18; Fig. 3. After the authorization process is complete (after the user enters her PIN), an interactive process 50 commences which allows users to interact with the display through input means 16. *Id.* at 4:44-49; Fig. 3. A user may then execute a transaction predicted by the system from the same screen: “If this particular service is already one of the options displayed on the screen 18 at the commencement of the interaction process 50, the user simply actuates one or more of the keys of the input means 16, as indicated on the screen 18.” *Id.* at 4:49-53. Coutts further discloses that the simplified menu screen that is displayed to a user on the display 18 following the initiation of a transaction (i.e., inserting a identification card) and prediction process could, for example, “consist[] of only four questions, such as: ‘Do you require \$20?’, ‘Do you require \$30?’, ‘Do you require a mini-statement?’, ‘Do you require some other transaction?’” *Id.* at 3:40-50.

There is no genuine dispute that Coutts meets the single screen limitation as defined by either Amazon or IPXL. The sum total of IPXL’s position regarding Coutts is an expert opinion contained in six paragraphs spanning two pages. *See* Ex. 25, Expert Rebuttal Report of Edward W. Felten at 16-17, ¶¶ 58-63. Although Dr. Felten does not contest that Coutts’ the screen displaying the “simplified menu” identified by Amazon’s expert displays the required transaction information on a single screen, he nevertheless states that the “simplified menu” displayed by the Coutts system cannot be *the* single screen of Claim 1 because the screen is displayed “only after the user has initiated a transaction.” *See Id.* at ¶ 62. Dr. Felten concludes that there is a transaction entry screen associated with initiating a transaction. *See* Ex. 26, June 17, 2004 Felten Tr. at 487:7-491:20. Dr. Felten’s conclusion is incorrect and unsupported by the Coutts patent.

Coutts plainly teaches “a transaction is initiated by a user inserting his identification card (block 40) into the slot (not shown) forming part of the card reader 20 of the ATM 10 being used

by the user. Ex. 18 at 3:62-65; Abstract. Coutts does require a user to enter *any* transaction information on screens that appear before the simplified menu screen in order to initiate a transaction. Contrary to Dr. Felten's assertion, there is no screen associated with a user initiating a transaction requires entry of transaction information, and Dr. Felten's erroneous statement cannot create a genuine issue of fact.

Dr. Felten's statement that the simplified menu screen of Coutts is "at most [] the last screen in a series of multiple screens through which the user is led (on a 'lead-through display') in order to initiate a transaction" is also wrong. Ex. 25, Felten Rebuttal at ¶ 62. Dr. Felten does not, because he cannot, provide any citations to the Coutts patents that supports his mistaken perception. In fact, the Coutts patent states otherwise: transactions may be initiated by merely inserting an identification card. Ex. 18 at 3:62-65. Unsupported assertions that Coutts does not contain the single screen limitation of Claim 1 cannot create a genuine issue of material fact. *See Avia Group*, 853 F.2d at 1560.

Moreover, under either parties' construction, the system of Coutts clearly allows users to not only execute a financial transaction displayed on the simplified menu single screen (which Dr. Felten does not dispute), it also allows users to specify parameters from that same screen.<sup>13</sup> That is, after the system predicts a transaction that a user is likely to desire such as a cash withdrawal, the system also predicts, "in order of probability, the most likely amounts expected to be requested." *See* Ex. 18 at 4:24-27. Therefore, when a user is presented with a single screen displaying a specialized menu with the predicted transaction type (e.g., withdrawal), the user is also presented with several different amounts that have been predicted (e.g., \$20, \$30). A user

---

<sup>13</sup> Even if Coutts did not allow users to specify parameters from the same screen but only to execute transactions, it still satisfies the single screen limitation; IPXL's constructions do not require the ability to do both.

may then use the input mechanism to select and execute a specific transaction by selecting "Do you require \$20?" (that is, withdrawal type of transaction for \$20), or use the input mechanism to specify a different amount by selecting "Do you require \$30?" (that is, a withdrawal type of transaction in the amount of \$30 instead for \$20). Therefore, a user is given the option of specifying a parameter (\$30 rather than \$20) for a particular transaction (withdrawal) and also executing a transaction from one screen. Ex. 24, Lichstein Report at 28-29. Dr. Felten's focus on the "Do you require some other transaction" option and the additional screens required to effectuate that transaction, Ex. 26, Felten Tr. at 479:24-481:24, is irrelevant as the limitations are met without resort to that feature.<sup>14</sup> Thus, under either parties' constructions, Coutts satisfies the single screen limitation.

**2. Tarbox Teaches the "Single Screen" Limitation Under Either Amazon's or IPXL's Proposed Constructions.**

Tarbox teaches an ATM system that enables users to pre-define and pre-select financial transactions such as cash withdrawals and bill payments and store them on a personal financial card for future use. *See* Ex. 15 at Abstract; 3:7-18. Tarbox teaches that a user inserts the financial card of the invention into an ATM, the system reads the instructions stored on the card, determines what (pre-selected) transactions are available to the user and displays only those transaction options to the user. *See* Ex. 15 at Abstract; 2:56-63. The user may then select one of the financial transaction options displayed to execute the selected transaction. *See Id.* at Abstract; 3:25-30. The system disclosed in Tarbox satisfies the single screen limitation under either parties' construction.

---

<sup>14</sup> Just as in an infringement analysis where an accused system containing all the claimed limitations cannot escape infringement by adding extra limitations, a prior art reference that contains each and every required limitation of a claim cannot be discarded because it contains additional features. *See Beckson Marine, Inc. v. NFM, Inc.*, 292 F.3d 718 (Fed. Cir. 2002) ("that which will [literally] infringe, if later, will anticipate, if earlier").



Dr. Felten opines that Tarbox does not meet the single screen limitation for two reasons: 1) a user cannot specify a transaction parameter on the single screen depicted in Fig. 5 of the Tarbox patent; and 2) the screen depicted in Fig. 5 is “merely the last in [] sequence” of multiple screens necessary to execute a transaction. *See* Ex. 25, Felten Rebuttal at ¶¶ 64-70. As detailed below, Dr. Felten’s opinion that Tarbox does not meet the single screen limitation is based on a misconception of Tarbox and can not raise a genuine dispute of material fact.

Fig. 5 of Tarbox clearly discloses the single screen claimed in Claim 1 of the ‘055 patent. *See* Ex. 24, Lichstein Report at 24-25. There is no dispute that the single screen disclosed in Tarbox Fig. 5 contains the transaction information required by Claim 1 under either parties’ constructions. Ex. 25, Felten Rebuttal at ¶ 64-70; Ex. 26, Felten Tr. at 499:23-500:10; Ex. 24, Lichstein Report at 24-25.

*First*, Tarbox unmistakably discloses that Fig. 5 is the single screen claimed by the ‘055 patent and does not require preceding screens that require transaction entry by a user. Tarbox teaches that the transactions displayed to the user on Fig. 5 are the result of reading the instructions stored on the card and *not* by any user transaction entry:

- when a card is inserted into the terminal, the “instructions *from the card* are read by the terminal which indicate the options available to the user. These options are displayed to the user who selects one of the financial transactions to be performed.” Ex. 15 at 6:1-4 (emphasis added).
- “the terminal—after *determining from the instruction on the card* what functions, i.e., financial transactions, are available to the card user—displays those options.” Ex. 15 at Abstract (emphasis added).

*Second*, Fig. 5 is described as “a customized display screen 503 using the present invention” which “shows the text blocks identifying the available functions that are personalized to the card user.” This screen also contains a “welcome message” 501 supporting the fact that Fig. 5 is in reality the first screen displayed to the user. *See* Ex. 15 at 6:17-18; Fig. 5.

*Third*, Figures 6A-6D further demonstrate that the screen depicted in Fig. 5 is the first and only screen necessary to execute a user's pre-selected transaction. Fig. 6A depicts the instructions and flow of those instructions that is the core program of Tarbox. *Id.* at 8:14-20. The instructions depicted in Fig. 6A enables the system to "retrieve customer related data store in card 400, display the available optional transaction functions to the customer, accept the customer's selection of a desired function, and finally execute the proper subroutine containing further instructions corresponding to the customer's selection." *See Id.* at 8:8:14-20. Stepping through the instructions, it is clear that the custom screen that displays only those transaction options available to a specific user (that is exemplified in Fig. 5) satisfies the single screen limitation as defined by both parties.

Instruction 601 retrieves information off a user's identification card. *Id.* at 8:20-24. Instruction 603 specifies that a screen with a predefined message welcoming the customer along with "his transaction options," including the titles of the functions that are available to the user is displayed. *Id.* at 8:25-34. Once the screen with personalized transaction options, exemplified by Fig. 5, is displayed to the user, instruction 605 enables users to select a transaction by using a input mechanism, in this case, function keys. *Id.* at 8:42-44. Only one screen containing a user's available transaction options is displayed; there is no support for the proposition that multiple transaction entry screens precede this screen.

Tarbox also discloses customized "Quick Cash" and "Pay Mortgage Bill" as specific transactions that can be defined and stored in a user's identification card. Fig. 6B depicts the sub-routine instructions for a customized "Quick Cash" transaction. *Id.* at 8:56-9:15. Fig. 6C depicts the sub-routine instructions for a bill payment function, in this case, "Pay Mortgage Bill" function. *Id.* at 9:16-35. Neither Fig. 6B or 6C indicate that a separate, additional screen is

displayed or necessary to execute financial transactions. Instruction 605 indicates that when a user selects an transaction option displayed on the first customized screen, instruction 607 “then executes the interpreted instructions . . . . For example, if the customer pressed the top button . . . the subroutine corresponding to that function would be executed.” *Id.* at 8:42-50. None of the instructions of 6B and 6C involve presenting a new display screen. Importantly, and in contrast with the “Quick Cash” and “Pay Mortgage Bill” subroutines, the instructions depicted in Fig. 6D for the subroutine “Withdraw Other Amount,” instructs that an additional display screen be presented to the user. *Id.* at Fig. 6D; 9:40-43. Moreover, Fig. 6A clearly indicates when a screen is displayed. *Id.* at Fig. 6A. Tarbox clearly indicates when a screen is displayed. There are no such indications that separate additional screens are displayed before the customized menu screen (e.g., Fig. 5). Therefore, Dr. Felten’s opinion that the customized screen exemplified in Fig. 5 is not a single screen because it is “merely the last in a sequence” is erroneous and cannot raise a genuine issue of material fact.

With regard to Dr. Felten’s only other basis for his opinion that Tarbox does not meet the single screen limitation, it should be noted that Dr. Felten does not dispute that a financial transaction such as a customized Quick Cash or Pay Mortgage transaction can be executed from a single screen. *See* Ex. 25, Felten Rebuttal at ¶¶ 64-70; Ex. 26, Felten Tr. at 499:23-500:10. And indeed, he cannot.<sup>15</sup> *Id.* at 8:47-51. He does opine, however, that a user could not enter selections to specify a parameter without resort to multiple screens. Ex. 25, Felten Rebuttal at ¶ 68. Dr. Felten is again mistaken. Tarbox teaches that a user may pre-select and pre-store a variety of financial transactions on a financial card for future use. *See* Ex. 15 at Abstract; 8:52-

---

<sup>15</sup> As discussed above, because IPXL’s construction does not require that a system enable both execution and specification of a parameter, Tarbox satisfies the single screen limitation as construed by IPXL.

55; Fig. 6F; 10:19-22. Tarbox therefore allows users to pre-select multiple types of transactions such as multiple "Quick Cash" transactions that only vary in dollar amounts. For example, "Quick Cash \$20," "Quick Cash \$40" and "Quick Cash \$60" (as is offered in many ATMs) can be pre-defined and displayed as available transaction options on a customized screen (following the same program depicted in Figs. 6A and 6B). From this single screen, a user can specify an amount (a parameter) from that one screen. Therefore, Tarbox describes a system that can enable users to both execute and specify parameters from a single screen. Dr. Felten's unsupported statements to the contrary cannot properly preclude summary judgment.

**3. Kelly Teaches the "Single Screen" Limitation Under IPXL's Proposed Constructions.**

Kelly teaches the single screen limitation under IPXL's proposed construction. Kelly describes a system that uses interactive kiosks to allow users to buy airline tickets using credit card information and reservation data previously stored in the system. *See* Ex. 20 at Abstract; 2:45-52. A user inserts her credit card into the credit card reader of a kiosk of the system described by Kelly. *Id.* at Fig. 4 (Ready Display). Once the system reads the credit card information, the kiosk displays a screen that asks for a user's reservation number. *Id.* at Fig. 4 (top screen). If a user inputs a reservation number, the system recalls the reservation and "will ask for confirmation by the passenger as indicated on the screen 64 in Fig. 5." *Id.* at 104:53-56. From that single screen 64, a user may execute the transaction by selecting "YES" to confirm the reservation; by confirming the reservation, the user instructs the system that her credit card should be charged for the transaction. *Id.* at 104:63-105:1. If a user does not know her reservation number, the user is led through multiple screens asking for data at each screen, as depicted by the series of screens on the right hand side of Figs. 4 and 5. As clearly depicted in Figs. 4 and 5, however, these screens are not necessary or used when a user enters her

reservation number and the confirmation single screen is immediately displayed. *Id.* at Fig. 4-5 (“Call up Itinerary from R”; screen 64).

Dr. Felten’s opinion that Kelly does not meet the single screen limitation is based on the multiple screens depicted in Figs. 4-6. Ex. 25, Felten Rebuttal at ¶ 107. Dr. Felten, however, completely ignores the fact that single screen 64 is presented immediately after the user enters her reservation number and without entering transaction data on any other preceding screens. *See* Ex. 20 at Figs. 4-5. Dr. Felten instead focuses his attention solely on the screens that are displayed by the system *if* the user *does not* enter her reservation number and the screen after the transaction is completed (Fig. 6). *See Id.* This does nothing to rebut the fact that Kelly discloses a system in which user-defined transaction information is displayed on a single screen from which a user can execute the transaction.

Because IPXL’s proposed construction of this limitation only requires that a system enable a user to use the input mechanism to execute the displayed financial transaction, *or* to use the input mechanism to enter selections to specify one or more transaction parameters, *or both*, Kelly meets this limitation because it allows a user to execute a transaction from a single screen that displays user-defined transaction information.

**D. There is No Genuine Issue of Fact Regarding The Remaining Limitations of Claim 1.**

IPXL cannot raise any genuine issue of material fact that the prior art references do not contain all of the remaining elements of Claim 1, under either Amazon’s or IPXL’s construction, or both. The Federal Rules of Civil Procedure’s Rule 26 mandate that all opinions and underlying basis that an expert expects to testify to must be disclosed in an expert report. Fed. R. Civ. P. 26(a)(2)(B). Dr. Felten did not include any basis for his opinion that the prior art patents did not anticipate Claim 1 other than his opinion that each of the prior art patents did not disclose

the single screen limitation. Ex. 25, Felten Report at 7-32. Despite attempting to retroactively inject opinions that Dr. Felten did not include into his report related to heretofore unchallenged limitations, Dr. Felten was finally forced to admit (after being compelled by the Duty Magistrate Judge) that he has no opinions other than those described in his report. *See* Ex. 26, Felten Tr. 491:4-495:11; 499:23-500:4; 516:21-517:1.

Accordingly, and as detailed in Amazon's pending Motion to Limit IPXL's Infringement and Validity Position, Dr. Felten should be precluded from offering any testimony or opinions other than those expressed in his expert report. Because IPXL has not disclosed an invalidity position with regard to Coutts, Tarbox, and Kelly for the remaining limitations of Claim 1, IPXL is unable to now raise a genuine issue of material fact with regard to anticipation by those references in response to this motion for summary judgment. As such, IPXL cannot proffer anything other than mere assertions of a factual dispute<sup>16</sup> that are unsupported by evidence or attorney argument, which cannot defeat a motion for summary judgment.

**E. Coutts Contains The Additional Limitations of Claim 2.**

Claim 2 of the '055 patent depends on Claim 1, and additionally requires that the system of Claim 1 predict transaction information based upon stored data for that user. Coutts teaches a system and method for predicting transaction information based on stored data for that user under both Amazon's and IPXL's constructions. IPXL's expert Dr. Felten's report contains no opinion as to Coutts related to Claim 2. Moreover, Dr. Felten admits that he has no opinion regarding the non-anticipation of Claim 2 by Coutts other than his opinion that the single screen limitation of Claim 1 is not met. *See* Ex. 26, Felten Tr. at 518:1-16. As discussed above, there is

---

<sup>16</sup> To the extent IPXL attempts to elicit this information from a lay witness, it would be impermissible under Fed. R. Evid. 701 which preclude the use of lay witnesses to "backdoor" opinion testimony that is based on scientific, technical or other specialized knowledge within the scope of Fed. R. Evid. 702.

no genuine issue of fact that the Coutts reference discloses the single screen limitation under both Amazon's and IPXL's proposed constructions by clear and convincing evidence.

**F. The Additional Limitations of Claim 9 are Contained in Each of the Prior Art Patents.**

Claim 9 depends on Claim 1 and additionally requires a means for identifying a user prior to allowing the user to execute a transaction. Each of the prior art patents disclose the means for identifying a user before allowing that user to execute transactions. *See* Ex. 24, Lichstein Report at 25, 29; Ex. 27, Mauro Supp. Report at 22-23. IPXL cannot point to any evidence sufficient to raise a genuine issue of fact regarding this limitation. Dr. Felten's report is silent as to the whether the prior art patents disclose the additional limitations of Claim 9, and he admits that he has no opinions other than those disclosed in his report. *See* Ex. 26, Felten Tr. 538:13-20.

**G. Coutts Contains The Additional Limitations of Claim 15.**

Claim 15 depends from Claim 9, which is dependent on Claim 1. Claim 15 requires that the system of Claim 1 and 9 also predict transaction information for a user based upon stored data for that user. As discussed above, Dr. Felten does not contest the fact that Coutts teaches a system and method for predicting transaction information based on stored data for that user under both Amazon's and IPXL's constructions or that Coutts teaches the identification of a user before allowing that user to execute transactions. *See* Ex. 26, Felten Tr. at .538:10-20.

**H. Coutts Contains The Additional Limitations of Claim 25.**

Claim 25 depends from Claim 2, which in turn depends on Claim 1. Claim 25 requires that the system of Claim 1 and 2 predict transaction information and that a user uses the input means to change the predicted transaction information or accept the displayed transaction information. As discussed above, Dr. Felten does not contest the fact that Coutts teaches a system and method for predicting transaction information based on stored data for that user

under both Amazon's and IPXL's constructions or that Coutts teaches allowing a user to change or accept the displayed predicted transaction information.

**I. Claim 25 of the '055 Patent is Also Invalid under 35 U.S.C. § 112, ¶ 2 and § 101 as a Matter of Law.**

Claim 25 of the '055 patent impermissibly includes two distinct statutory classes—a product and a process—in a single claim. This renders Claim 25 invalid for two reasons: 1) Claim 25 is indefinite under 35 U.S.C. §112 ¶ 2 because it is ambiguous with regard to whether a product or process is being claimed, and 2) Claim 25 fails to satisfy the requirement of 35 U.S.C. §101 that only a single distinct statutory class be claimed.

Determination of claim invalidity for indefiniteness is “a legal conclusion that is drawn from the court's performance of its duty as the construer of claims.” *Exxon Research and Eng'g Co. v. United States*, 265 F.3d 1371, 1376 (Fed. Cir. 2001) (“indefiniteness is a question of law”). Consequently, claim indefiniteness is appropriate for disposition on a summary judgment motion. *See id.*

**1. Claim 25 is Indefinite Under 35 U.S.C. §112 ¶ 2.**

Section 112 ¶ 2 “requires a claim to particularly point out and distinctly claim the subject matter” of the invention. *See Ex parte Lyell*, No. 89-0461, 1990 WL 354583, at \*5 (Bd. Pat. App. & Inter. Apr. 9, 1990). However, “combining two separate statutory classes of invention in a single claim ... is not sufficiently precise to provide competitors with an accurate determination of the ‘metes and bounds’ of protection involved.” *See Id.* at \*3. Accordingly, an invention “which purports to be both an apparatus and a process in a single claim, is ambiguous and properly rejected” as indefinite. *See Id.* at \*6.

Here, Claim 25 includes both a system and a method of using the system. First, it claims “[t]he *system* of Claim 2 wherein the predicted transaction information comprises both a



transaction type and transaction parameters associated with that transaction type ...” This refers to the structure of a system used in connection with an electronic fund transfer system. However, the second part of the claim: “. . . and the user *uses the input means to either change* the predicted transaction information *or accept* the displayed transaction type and transaction parameters” (emphasis added) claims a method for using the structure described in the first part of the claim. This is the same defect that rendered the claim at issue invalid in *Ex Parte Harmanoglu*, No. 2002-2136, 2004 WL 77344, at \*3 (Bd. Pat. App. & Int. 2004). *See Id.* (finding a claim indefinite because of an ambiguity whether it “is directed to the article of manufacture recited in the first paragraph of the claim or to the process of using such article of manufacture recited in the second paragraph of the claim”).

**2. Claim 25 is Also Invalid Under 35 U.S.C. §101.**

This same flaw renders Claim 25 invalid under § 101. “[I]nventions may be patentable only if they fall within one of the statutory classes of subject matter specified in 35 U.S.C. §101. *See Ex parte Lyell*, 1990 WL 354583, at \*4. Accordingly, claims “cannot be both method and apparatus,” and “[i]t must be clear from its wording that it is drawn to one or the other of these mutually exclusive statutory classes of invention.” *See Id.*; *see also Ex parte Forsyth*, 151 U.S.P.Q. 55, 56 (Bd. Pat. App. & Int. 1966) (a claim cannot be both method and apparatus,” but rather, “must be clear by its wording that it is drawn to one or the other of these two mutually exclusive statutory classes of invention”).

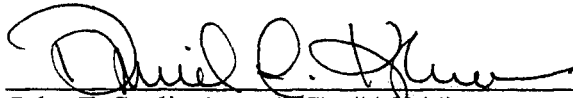
As discussed earlier, Claim 25 is directed to both a system and a method for using the system. Therefore, Claim 25 is invalid under 35 U.S.C. §101. *See Ex parte Lyell*, 1990 WL 354583, at 4-5.

**CONCLUSION**

For the reasons stated above, Amazon respectfully requests that the Court grant summary judgment in favor of Amazon that its 1-Click® Feature does not infringe claims 1, 2, 9, 15, and 25 of the '055 patent, and that Claims 1, 2, 9, 15, and 25 of the '055 patent are invalid.

Date: June 23, 2004

Respectfully submitted,



John F. Scalia, Esq. (VSB #46444)  
David A. Kessler, Esq. (VSB #42315)  
GREENBERG TRAURIG, LLP  
1750 Tysons Boulevard  
Suite 1200  
McLean, VA 22102  
Tel: (703) 749-1300

David A. Zapolsky, Esq.  
Vice President & Associate General Counsel  
AMAZON.COM, INC.  
P.O. Box 81226  
Seattle, WA 98108-1226  
Tel: (206) 266-1323

David K. Callahan, P.C., Esq.  
Thomas Pasternak, Esq.  
KIRKLAND & ELLIS LLP  
200 East Randolph Drive  
Chicago, Illinois 60601  
Tel: (312) 861-2000

Attorneys for Amazon.com, Inc.

**CERTIFICATE OF SERVICE**

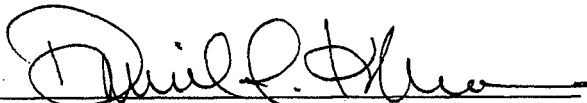
I hereby certify that a copy of the foregoing Defendant Amazon.com, Inc.'s Memorandum in Support of Defendant Amazon.com, Inc.'s Motion for Summary Judgment of Non-Infringement and Invalidity, and supporting declarations and exhibits, were delivered this 23<sup>rd</sup> day of June 2004, as follows:

**BY FACSIMILE AND HAND DELIVERY**

Keith R. Styles, Esq.  
Robins, Kaplan, Miller & Ciresi, LLP  
Suite 1200  
1801 K Street, NW  
Washington, DC 20006  
Tel: (202) 775-0725  
*Counsel for Plaintiff IPXL Holdings, LLC*

**BY FACSIMILE AND FEDEX**

Emily M. Rome, Esq.  
Robins, Kaplan, Miller & Ciresi, LLP  
2800 LaSalle Plaza  
800 LaSalle Avenue  
Minneapolis, Minnesota 55402-2015  
Tel: (612) 349-8500  
*Counsel for Plaintiff IPXL Holdings, LLC*

  
\_\_\_\_\_  
David A. Kessler

10/732,744

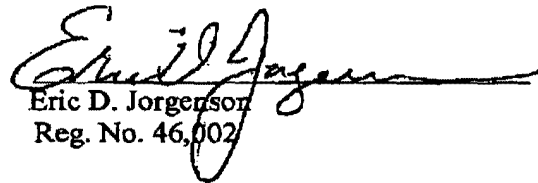
LEADP102USA

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-3663 (LEADP102USA). Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



Eric D. Jorgenson  
Reg. No. 46,002

Law Office of Eric D. Jorgenson, Esq.  
1457 King Road  
Hinckley, Ohio 44233  
Telephone (216) 225-4169  
Facsimile (330) 278-3135

# **EXHIBIT F**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

LEADER TECHNOLOGIES, INC.,	)	
a Delaware corporation,	)	
	)	Civil Action No. 1:08-cv-08-862-JJF
Plaintiff,-Counterdefendant,	)	
	)	
v.	)	<b>DISCLOSURE OF EXPERT</b>
	)	<b>TESTIMONY FOR JAMES</b>
FACEBOOK, INC.,	)	<b>HERBSLEB, PH.D. PURSUANT</b>
a Delaware corporation,	)	<b>TO FED. R. CIV. P. 26(A)(2)</b>
	)	
Defendant-Counterclaimant	)	

Plaintiff Leader Technologies, Inc. (“Leader”) submits the following disclosure of expert testimony for James Herbsleb, Ph.D. pursuant to Rule 26(a)(2) of the Fed. R. Civ. P. This expert is engaged in ongoing refinement of his opinions and expected testimony, and Leader specifically reserves the right to modify or supplement the information contained in this disclosure pursuant to the Federal Rules of Civil Procedure.

I, James Herbsleb, Ph.D., submit the following expert report on behalf of Leader. All opinions and facts stated herein are true and correct to the best of my knowledge. I reserve the right to modify or supplement this disclosure if more information is made available to me.

1. I am a Professor of Computer Science and Director of the Software Industry Center at Carnegie Mellon University.

2. In 1991, I received a M.S. in Computer Science from the University of Michigan. I also have a Ph.D. in Cognitive Social Psychology (1984) and J.D. (1980) from the University of Nebraska.

3. My research focuses on collaborative technologies and practices for global software development. I served as PI on two completed and one ongoing NSF-funded project investigating various aspects of collaborative software engineering. My research interests are in geographically-distributed software engineering, open source software development, collaboration over distance, and tools and technologies that support coordination.

4. I have authored more than 70 publications, including journal publications.

5. The details about my work experience and education are summarized in my curriculum vitae ("CV") attached hereto as Exhibit A, which also contains a list of publications I authored within the last 10 years. This report is based on my education, professional career and relevant experience, as well as the materials reviewed.

6. I am being compensated for my time as an expert witness for Leader in this litigation at a rate of \$300 an hour, or \$2,500 per day.

7. In the past four years I have not testified at trial or at deposition.

8. I intend to give a tutorial of the technology involved in this case. In preparation for this tutorial, I intend to create graphic depictions and/or tables and charts for exhibits to aid the Court in its understanding of the technology involved. However, at this time I have not specifically created any exhibits for this litigation.

9. In preparation of this expert report I relied exclusively on U.S. Patent No. 7,139,761 (the “761 Patent”), the Court’s claim construction order related to this patent, and my knowledge of computer science.

**BASIC INTERNET INFRASTRUCTURE**

10. A web site is hosted on a web server, one or more computer systems running specialized software for storing and retrieving data. The web site can be accessed over the Internet by a client. The Internet is an extremely large computer network which spans the world, and connects billions of computers together. A client is a computer connected to the Internet, and is typically operated by a user. A common way of viewing information from the Internet is through a computer application called a “web browser.” The web site will typically send information to the client and which will be displayed on the web browser. The information displayed on the web browser is commonly referred to as a “webpage.” The webpage is generated from the web server, as is the functionality of the webpage. When a client connected to the Internet, it is commonly referred to as being “online.”

11. When a client accesses a web site, the communications between the web server and the client form a session. At the start of the session, a web site may have a user log-in and provide credentials which identifies and authenticates the user.

12. After the user has been authenticated, the web site may generate a webpage which allows a user to share content, such as pictures, video, and text documents, with other users. This would allow, for example, two friends who are located on different sides of the globe to share a photo. These friends could also share the photo with other users, demonstrating how content can be easily distributed online.

13. Content can have metadata associated with it. Metadata is commonly understood to be data about data. Examples of metadata include the time the content was created and who created the content.



**TRADITIONAL SYSTEMS**

14. The '761 Patent describes several traditional systems for managing data. These systems were inefficient for large scale online collaboration because data was not shared in an efficient manner, and it lacked context surrounding online collaboration.

15. For example, many users organize their data in so called "folders," which mimic the operation of folders in the physical work. However, using hierarchical folders to store and organize data is highly inefficient. For example, if a file was associated with several different topics, in order to keep the folder in each topic, multiple locations would need to have the same file. As a result, the context of the file is completely dependent on which folder the user manually selects to put the file in. It is also difficult for other users to find data that the user organized into folders because the user's decisions about contexts of files are subjective.

**ONLINE COLLABORATION TOOL OF THE '761 PATENT**

16. The '761 Patent discloses an online collaboration tool that facilitates efficient communication, organization, and content sharing between users and allows multiple users to share and use electronically stored content over a network.

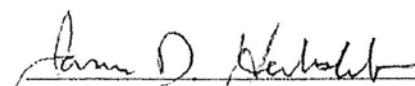
17. The online collaboration tool described in the '761 Patent addresses the problems with traditional systems. The technology of the '761 Patent uses a server that hosts the online collaboration tool and is connected through the internet to the user's computer, typically running a web browser. The '761 Patent describes a technology where the user can upload content over the Internet, through the web browser on the user's computer, to the online collaboration tool. The online collaboration tool of the '761 Patent automatically associates context information with the content. This is described as being performed by a context component residing on the server, which associates the content with context information, relating to the context in which this content was created. This context information is stored as metadata and associated with newly created content. In this manner it provides valuable context to the content. This information is then stored on the back-end server in a database or other data storage means.

18. The online collaboration tool described in the '761 Patent also automatically tracks user actions within different environments on the online collaboration tool using a tracking component. For example, the user may move from their home page to the home page of a friend or coworker. The tracking component tracks the user's movement and automatically captures the user's actions where the user accesses or employs their previously uploaded content from this new context. The metadata associated with the data is then updated based on how content is used in the new context and what actions are taken. The type of user actions the tracking component captures includes identification of the user who performed the action, the time the action was taken, and context in which the action was taken.

19. The online collaboration tool described in the '761 Patent thereby automatically captures information about user content and leverages this information to allow effective collaboration. For example, the user content can be efficiently shared and used by many people using the online collaboration tool. The information about the user content can be used to avoid requiring multiple versions of a file, allowing a file to be uploaded once and accessed from multiple locations, by multiple users, in multiple contexts. Furthermore, a user can provide content in one context and have that content associated with multiple other contexts. This allows the user to use the content in different contexts and not have to re-upload content in the other contexts. The information can also be leveraged to allow users to easily search for particular files based on the captured metadata.

20. The highest contextual assumption of the online collaboration tool is that there exists an entity of one or more users and that the data storage model assumes that the content is associated with the user. Thus, metadata is created when a user creates an account, and that metadata gets constantly updated based on the content the user uploads, or actions the user takes.

Dated: April 8, 2010.

  
James Herbsleb, Ph.D.

**EXHIBIT A**

James D. Herbsleb  
Professor of Computer Science  
Director, Software Industry Center  
Institute for Software Research  
Carnegie Mellon University  
April, 2010

### Coordinates

---

8117 Wean Hall  
Pittsburgh, PA 15213  
Phone: (412) 268-8933

E-mail: [jdh@cs.cmu.edu](mailto:jdh@cs.cmu.edu)  
Web page: <http://conway.isri.cmu.edu/~jdh/>  
Fax: (412) 268-7287

### Education

---

1991-93 Postdoctoral Research Fellow, University of Michigan  
Collaborative Software Engineering

1991 M.S. University of Michigan  
Computer Science

1984 Ph.D. University of Nebraska  
Cognitive Social Psychology

1980 J.D. University of Nebraska  
Joint Program in Law and Psychology

1976 B.A. Monmouth College, Monmouth, Illinois  
Psychology and Economics

### Employment Experience

---

2002-present Professor of Computer Science, Institute for Software Research, School of  
Computer Science, Carnegie Mellon University

1996-2002 Member of Technical Staff, Software Production Research Department, Lucent  
Technologies

1994-96 Member of Technical Staff, Software Engineering Institute, Carnegie Mellon  
University

1991-93 Postdoctoral Research Fellow, University of Michigan

1992 Lecturer, Department of Psychology, University of Michigan

1988-91 Research and Teaching Assistantships, Department of Electrical Engineering and  
Computer Science, University of Michigan

1982-89 Associate Professor, Department of Psychology, Hillsdale College, Hillsdale,  
Michigan

## Publications

---

### Peer-Reviewed Journals

1. Gurbani, V.K., Garvert, A., & Herbsleb, J.D. (2010). Managing a Corporate Open Source Software Asset. *Communications of the ACM*, 53, 2, pp. 155-159.
2. Cataldo, M., Mockus, A., Roberts, J.A., & Herbsleb, J.D. (2009). Software Dependencies, Work Dependencies, and Their Impact on Failures. *IEEE Transactions on Software Engineering*, 99, 864-878.
3. Espinosa, A., Slaughter, S., Kraut, R., & Herbsleb, J. (2007). Familiarity, Complexity and Team Performance in Geographically Distributed Software Development. *Organization Science*, July-August, 18, pp. 613 – 630.
4. Espinosa, J. A., Slaughter, S. A., Kraut, R. E., & Herbsleb, J. D. (2007). Team Knowledge and Coordination in Geographically Distributed Software Development. *Journal of Management Information Systems*, 24, 1, pp. 5 – 12.
5. Herbsleb, J.D. & Mockus, A. (2003). An Empirical Study of Speed and Communication in Globally-Distributed Software Development. *IEEE Transactions on Software Engineering*, 29, 3, pp. 1-14.
6. Mockus, A., Fielding, R., & Herbsleb, J.D. (2002). Two Case Studies of Open Source Software Development: Apache and Mozilla. *ACM Transactions on Software Engineering and Methodology*, 11, 3, pp. 309-346.
7. Colbert, R. O., Compton, D. S., Hackbarth, R. L., Herbsleb, J. D., Hoadley, L. A., & Wills, G. J. (2001). Advanced Services: Changing How We Communicate. *Bell Labs Technical Journal*, 6(1), Jan.-Jun. 2001, pp. 211-228.
8. Herbsleb, J.D. & Moitra, D. Global Software Development. *IEEE Software*, March/April 2001, pp. 16-20.
9. El Emam, K., Goldenson, D., McCurley, J., Herbsleb, J. D. (2001). Modeling the Likelihood of Software Process Improvement: An Exploratory Study. *Empirical Software Engineering*, 6, 3, pp. 207-229.
10. Herbsleb, J. D. & Grinter, R. E. (1999). Architectures, Coordination, and Distance: Conway's Law and Beyond. *IEEE Software*, Sept/Oct 1999, pp. 63-70.
11. Herbsleb, J. D., & Kuwana, E. (1998). An Empirical Study of Information Needs in Collaborative Software Design. *Journal of the Information Processing Society of Japan*, 39, 3, 1998.
12. Herbsleb, J. D., Zubrow, D., Goldenson, D., Hayes, W., & Paulk, M. (1997). Software Quality and the Capability Maturity Model. *Communications of the ACM*, 40, 30-40.
13. Herbsleb, J. D., Klein, H., Olson, G. M., Brunner, H., Olson, J. S., and Harding, J. (1995). Object-oriented analysis and design in software project teams. *Human Computer Interaction*, 10, 249-292.
14. Olson, G. M., Herbsleb, J. D., and Rueter, H. H. (1994). Characterizing the sequential structure of interactive behaviors through statistical and grammatical techniques. *Human Computer Interaction*, 9, 427-472.

15. Herbsleb, J.D., Sales, B.D., Overcast, T.D. (1985). Challenging Licensure and Certification, *American Psychologist*, Vol. 40, pp. 1165-1178.

### Peer-Reviewed Conferences

16. Wagstrom, P., Herbsleb, J.D., & Carley, K. (2010). Communication, Team Performance, and the Individual: Bridging Technical Dependencies. To appear, *Academy of Management Conference*. Received *Best Paper Award*.
17. Wagstrom, P., Mockus, A., Herbsleb, J.D., & Kraut, R.E. (2010). The Impact of Commercial Organizations on Volunteer Participation in an Online Community. To appear, *Academy of Management Conference*.
18. Dekel, U. & Herbsleb, J.D. (2009). Improving API Documentation Usability with Knowledge Pushing. In Proceedings, *International Conference on Software Engineering*, Vancouver, Canada, May 16-24, pp. 320-330.
19. Sarma, A., Maccherone, L., Wagstrom, P., & Herbsleb, J. (2009). Tesseract: Interactive Visual Exploration of Socio-Technical Relationships in Software Development. In Proceedings, *International Conference on Software Engineering*, Vancouver, Canada, May 16-24, pp. 23-33.
20. Herbsleb, J., Dabbish, L., Wagstrom, P., & Sarma, A.
21. Cataldo, M. & Herbsleb, J.D. (2008). Communication networks in geographically distributed software development. In Proceedings, *ACM Conference on Computer-Supported Cooperative Work*, San Diego, CA, Nov. 8-12, pp. 579-588.
22. Dekel, U. & Herbsleb, J.D. (2008). Pushing relevant artifact annotations in collaborative software development. In Proceedings, *ACM Conference on Computer-Supported Cooperative Work*, San Diego, CA, Nov. 8-12, pp. 1-4.
23. Cataldo, M., Herbsleb, J.D., Carley, K.M. (2008). Socio-technical congruence: a framework for assessing the impact of technical and work dependencies on software development productivity. In Proceedings, *Second ACM-IEEE International Symposium on Empirical Software Engineering and Measurement*, Kaiserslautern, Germany, Oct. 9-10, pp. 2-11. Received *ACM Distinguished Paper award*.
24. Cataldo, M., Bass, M., Herbsleb, J.D., Bass, L. (2007). On Coordination Mechanisms in Global Software Development. *International Conference on Global Software Engineering*, Munich, Germany, August 27-30, pp. 71-80.
25. Lescher, C., Bass, M., Herbsleb J.D. (2007). Collaboration in Global Software Projects at Siemens: An Experience Report. *International Conference on Global Software Engineering*, Munich, Germany, August 27-30, pp. 33-39.
26. LaToza, T.D., Garlan D., Herbsleb J.D., & Myers, B.A. (2007). Program Comprehension as Fact-Finding, in proceedings of the *European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, Dubrovnik, Croatia, September 3-7, pp. 361-370.
27. Dekel, U. & Herbsleb, J.D. (2007). Notation and Representation in Collaborative Object-Oriented Design, in Proceedings, *OOPSLA 2007*, pp. 261-280.

28. Bass, M., Herbsleb, J., Cataldo, M., Bass, L. Architectural Misalignment: An Experience Report. In Proceedings, *Sixth Working IEEE/IFIP Conference on Software Architecture*. Mumbai, India, January 6-9, 2007.
29. Ankolekar, A., Sycara, K., Herbsleb, J., Kraut, R., & Welty, C. (2006). Supporting online problem-solving communities with the semantic web. In Proceedings, *International World Wide Web Conference*, Edinburgh, Scotland, pp. 575-584.
30. Balan, R.K., Gergle, D., Satyanarayanan, M., & Herbsleb, J. (2006). Simplifying Cyber Foraging for Mobile Devices. In Proceedings, *ACM International Conference on Mobile Systems, Applications, and Services*. San Juan, Puerto Rico, June 11-14, pp. 272-285.
31. Cataldo, M., Wagstrom, P., Herbsleb, J.D., Carley, K. (2006). Identification of coordination requirements: Implications for the design of collaboration and awareness tools. In Proceedings, *ACM Conference on Computer-Supported Cooperative Work*, Banff Canada, pp. 353-362. Received *Best Paper Award*.
32. Herbsleb, J.D., Mockus, A., Roberts, J.A. (2006). Collaboration in Software Engineering Projects: A Theory of Coordination. *International Conference on Information Systems*, Milwaukee, WI. Received *Best in Track Award*.
33. Mullick, N., Bass, M., Houda, Z., Sangwan, R., Paulish, D., Cataldo, M., Herbsleb, J., Bass, L. (2006). Siemens Global Studio Project: Experiences adopting an integrated GSD infrastructure. *IEEE International Conference on Global Software Engineering*.
34. Gurbani, V.K., Garvert, A., Herbsleb J.D. A Case Study of a Corporate Open Source Development Model. (2006). In Proceedings, *International Conference on Software Engineering*, Shanghai, China, May 20-25, 2006, pp. 472-481.
35. Li, P.L., Herbsleb, J., Shaw, M., Robinson, B. (2006). Experiences and Results from Initiating Field Defect Prediction and Product Test Prioritization Efforts at ABB Inc. In *Proceedings of the International Conference on Software Engineering*, Shanghai, China, May 20-25, pp. 413-423.
36. Espinosa, A., Slaughter, S. A., Herbsleb, J. D. and Kraut, R. E. (2005). Coordination Mechanisms in Globally Distributed Software Development. In *Proceedings of the First International Conference on Management of Globally Distributed Work*, Bangalore, India.
37. Li, P.L, Herbsleb, J., Shaw, M. "Forecasting Field Defect Rates Using a Combined Time-based and Metrics-based Approach: a Case Study of OpenBSD". In *Proceedings of the 16<sup>th</sup> IEEE International Symposium on Software Reliability Engineering*, Nov 2005.
38. Herbsleb, J., Paulish, D.J., Bass, M. (2005). Global Software Development at Siemens: Experience from Nine Projects. *International Conference on Software Engineering (ICSE)*, pp. 524 - 533, St. Louis, MO, May 15-21, 2005.
39. Wagstrom, P., Herbsleb, J., Carley, K. A Social Network Approach to Free/Open Source Software Simulation. To appear, the *First International Conference on Open Source Systems*, Genoa, Italy, July 11 - 15, 2005.
40. Li, P. L., Herbsleb, J., Shaw, M. Finding Predictors of Field Defects for Open Source Software Systems in Commonly Available Data Sources: a Case Study of OpenBSD (2005).

To appear, IEEE International Software Metrics Symposium, 19-22 September, Como, Italy.

41. Li, P., Shaw, M., Herbsleb J., Ray, B., & Santhanam, P. (2004). Empirical Evaluation of Defect Projection Models for Widely-deployed Production Software Systems. To appear, *ACM Symposium on the Foundations of Software Engineering (FSE)*.
42. Herbsleb, J.D. & Mockus, A. (2003). Formulation and Preliminary Test of an Empirical Theory of Coordination in Software Engineering. In proceedings, *ACM Symposium on the Foundations of Software Engineering (FSE)*, Helsinki, Finland, pp. 112-121.
43. Espinosa, J. A., Kraut, R.E., Slaughter, S. A., Lerch, J. F., Herbsleb, J. D., Mockus, A. Shared mental models, familiarity, and coordination: A multi-method study of distributed software teams (2002). *International Conference on Information Systems (ICIS)*, Barcelona, Spain, December 15th – 18th, pp. 425-433.
44. Handel, M. & Herbsleb, J.D. (2002). What is Chat Doing in the Workplace? Proceedings of *ACM Conference on Computer-Supported Cooperative Work (CSCW)*, New Orleans, LA, pp. 1-10.
45. Herbsleb, J.D., Atkins, D.L., Boyer, D.G., Handel, M., & Finholt, T.A. (2002). Introducing Instant Messaging and Chat into the Workplace. In proceedings of *ACM Conference on Computer-Human Interaction (CHI)*, pages 171-178, Minneapolis, MN, April 20-25.
46. Mockus, A. & Herbsleb, J.D. Expertise Browser: A Quantitative Approach to Identifying Expertise (2002). In proceedings of *International Conference on Software Engineering (ICSE)*, pp. 503-512, Orlando, FL, May 19-25.
47. Herbsleb, J.D., Mockus, A., Finholt, T.A., & Grinter, R.E. (2001). An Empirical Study of Global Software Development: Distance and Speed. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 81-90, Toronto, Canada, May 15-18.
48. Siy, H.P., Mockus, A, Herbsleb, J.D., Krishnan, M., and Tucker, G. T. (2001). Making the software factory work: Lessons from a decade of experience. In proceedings, *Metrics 2001: Seventh International Symposium on Software Metrics*, pages 317-327, London, England, April 4-6.
49. Mockus, A. & Herbsleb, J.D. Challenges of global software development. (2001). In proceedings, *Metrics 2001: Seventh International Symposium on Software Metrics*, pages 182-184, London, England, April 4-6.
50. Espinosa, J. A., Kraut, R.E., Slaughter, S. A., Lerch, J. F., Herbsleb, J. D., Mockus, A. (2001). Shared Mental Models and Coordination in Large-Scale, Distributed Software Development. To appear in proceedings, *International Conference on Information Systems (ICIS)*, New Orleans, LA, December 16- 19.
51. Godefroid, P., Herbsleb, J.D., Jagadeesan, L.J., Li, D. (2000). Ensuring Privacy in Presence Awareness Systems: An Automated Verification Approach. In proceedings, *ACM Conference on Computer-Supported Cooperative Work (CSCW)*, pages 59-68, Philadelphia, PA, Dec. 2-7.



52. Herbsleb, J.D., Mockus, A., Finholt, T.A., & Grinter, R.E. (2000). Distance, Dependencies, and Delay in a Global Collaboration. In Proceedings, *ACM Conference on Computer-Supported Cooperative Work (CSCW)*, pages 319-328, Philadelphia, PA, Dec. 2-7.
53. Mockus, A., Fielding, R.T., & Herbsleb, J. (2000). A Case Study of Open Source Software Development: The Apache Server. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 263-272, Limerick Ireland, June 5-7. *Most Influential Paper Award, ICSE 2010*.
54. Herbsleb, J. D. & Grinter, R. E. (1999). Splitting the Organization and Integrating the Code: Conway's Law Revisited. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 85-95, Los Angeles, CA, May 16-22.
55. Herbsleb, J. D. Metaphorical Representation in Collaborative Software Engineering. (1999). In proceedings, *International Joint Conference on Work Activities, Coordination, and Collaboration*, pages 117-125, San Francisco, CA, February 22-25.
56. Grinter, R. E., Herbsleb, J. D., & Perry, D. E. (1999). The Geography of Coordination: Dealing with Distance in R&D Work. In proceedings, *International Conference on Supporting Group Work*, Phoenix, AZ, November 14-17.
57. Herbsleb, J. D. & Grinter, R. E. (1998). Conceptual Simplicity Meets Organizational Complexity: Case Study of a Corporate Metrics Program. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 271-280, Kyoto, Japan, April 19-25.
58. Herbsleb, J. D. & Goldenson, D. (1996). A systematic survey of CMM experience and results. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 323-330, Berlin, Germany, March 25-30.
59. Herbsleb, J. D., and Kuwana, E. (1993). Preserving knowledge in design projects: What designers need to know. In proceedings, *Human Factors in Computing Systems (CHI)*, pages 7-14, Amsterdam, The Netherlands, April 24-29.
60. Kuwana, E. and Herbsleb, J.D. (1993). Representing knowledge in requirements engineering: An empirical study of what software engineers need to know. In proceedings, *IEEE International Symposium on Requirements Engineering*, p. 273-276, San Diego, CA, January 4-6.

### **Book Chapters**

61. Olson, G. M., Olson, J. S., Storrøsten, M., Carter, M., Herbsleb, J., and Rueter, H. (1996). The structure of activity during design meetings. In T. Moran & J. Carroll (Eds.) *Design Rationale: Concepts, Techniques, and Use*. Lawrence Erlbaum: Mahwah, NJ. pp. 217-239.
62. Goldenson, D.R., El Emam, K., Herbsleb, J., and Deephouse, C. (1998) Empirical studies of software process assessment methods, in T. P. Rout (ed.) *Software Process Assessment and Improvement*, Southampton, UK: Wit Press, 1998.

### **Keynote addresses, Invited Talks**

63. Herbsleb, J. (2010).
64. Herbsleb, J. (2010). Sociotechnical Ecosystems. IFIP WG 2.9, San Diego, February 10, 2010. (Invited presentation).

65. Herbsleb, J. (2009).
66. Herbsleb, J. (2008). Coordination in Global Development. University of British Columbia, October 2, 2008. (Distinguished Speaker Series).
67. Herbsleb, J. (2008). Tactics for Global Software Development: When to do What? *Siemens Software Engineering Conference*, July 17, 2008. (Keynote address).
68. Herbsleb, J. (2007). A Highly Selective, Deeply Biased, and Mildly Heretical View of Software Engineering. Microsoft Research / University of Washington Summer Institute, August 12, 2007. (Keynote address).
69. Herbsleb, J. (2007). Global Software Engineering: The Future of Socio-technical Coordination, in *Future of Software Engineering 2007*, L. Briand and A. Wolf, Editors. 2007, IEEE-CS Press. (Invited presentation, ICSE 2007.)
70. Herbsleb, J. (2007). Open Source Ecologies. IBM Toronto, Academy of Technology Open Source Conference, February 27, 2007. (Keynote address).
71. Herbsleb, J. (2007). Aligning Coordination Behavior with Coordination Needs: Congruence in Software Development. IBM TJ Watson Research, February 13, 2007. (Invited presentation).
72. Herbsleb, J. (2007). Coordination in Engineering: Computing Task Dependencies from Work Artifacts. Boeing Phantom Works, January 9, 2007. (Invited presentation.)
73. Herbsleb, J. (2006). Coordination in GSD: Making the Invisible Visible. *International Conference on Global Software Engineering*, Florianopolis, Brazil, Oct. 16. (Keynote address)
74. Herbsleb, J. (2006). From Software Engineering to Software as Service: Computing Task Dependencies from Work Artifacts. Microsoft Research Laboratory, August 11, 2006. (Invited presentation.)
75. Herbsleb, J. (2006). Dependencies and awareness in unstable environments. Stanford University, March 22, 2006. (Invited presentation.)
76. Herbsleb, J. (2006). Overcoming the Challenges of Global Development. *OOP 2006*, Munich, Germany, January 18, 2006. (Invited presentation).
77. Herbsleb, J. (2006). What Every Commercial Developer Should Know about How Open Source Works. *OOP 2006*, Munich, Germany, January 19, 2006. (Invited presentation).
78. Herbsleb, J. (2005). Integrating organizational systems. Keynote, Siemens Technology Day 2005, Salzburg, Austria, 11/7/2005.
79. Herbsleb, J. (2005). Beyond computer science. *International Conference on Software Engineering (ICSE)*, pp. 23-27, St. Louis, MO, May 15-21, 2005 (invited presentation).
80. Herbsleb, J. (2004). Why open source works. *Open Source and Free Software: Concepts, Controversies, and Solutions*, May 9-11, University of Toronto, Toronto, Canada. <http://osconf.kmdi.utoronto.ca/default.htm> (invited presentation.)
81. Herbsleb, J. (2003). Two Cases of Open Source Software Development: Apache and Mozilla. *HBS - MIT Sloan Free/Open Source Software Conference: New Models of Software*

*Development*, June 19-20, Harvard Business School and MIT Sloan School of Business.  
<http://opensource.mit.edu/conference.html> (invited presentation.)

82. Herbsleb, J. (2002). Research Priorities in Open Source Software Development. *Advancing the Research Agenda on Free/Open Source Software*, Oct. 14, Brussels, Belgium. Institute of Infonomics, University of Maastricht and Center for Information Policy, University of Maryland. <http://www.infonomics.nl/FLOSS/workshop/> (invited presentation.)
83. Herbsleb, J., (with Atkins, D., Handel, M., Mockus, A., Perry, D., Wills, G). Global Software Development: The Bell Labs Collaboratory. In proceedings, *International Conference on Software Engineering (ICSE 2001)* Toronto, Canada, May 15-18, p. 681. (Invited presentation.)

### **Selected Other Papers**

84. Cataldo, M., Herbsleb, J., & Carley, K. (2008). Socio-Technical Congruence: A Framework for Assessing the Impact of Technical and Work Dependencies on Software Development. Workshop on Socio-Technical Congruence (STC-2008), May 10, Leipzig, Germany.
85. Sarma, A. & Herbsleb, J.D. (2008). Using development experience to calculate congruence. Workshop on Socio-Technical Congruence (STC-2008), May 10, Leipzig, Germany.
86. Sarma, A., Herbsleb, J., & van der Hoek, A. (2008). Challenges in Measuring, Understanding, and Achieving Social-Technical Congruence. Workshop on Socio-Technical Congruence (STC-2008), May 10, Leipzig, Germany.
87. Herbsleb, J., Sarma, A., Mockus, A., & Cataldo, M. (2008). Using Distributed Constraint Satisfaction to Build a Theory of Congruence. Workshop on Socio-Technical Congruence (STC-2008), May 10, Leipzig, Germany.
88. Wagstrom, P. & Herbsleb, J. (2008). Individualized Socio-Technical Congruence. Workshop on Socio-Technical Congruence (STC-2008), May 10, Leipzig, Germany.
89. Herbsleb, J., Weber, R., Cai, Y., & Finholt, T. (2008). Economic Congruence in Open Source Ecologies. Workshop on Socio-Technical Congruence (STC-2008), May 10, Leipzig, Germany.
90. Wagstrom, P. & Herbsleb, J.D. (2006). Dependency forecasting in the distributed agile organization. *Communications of the ACM*, 49 (10), pp. 55-56.
91. Shaw, M., Herbsleb, J.D., Ozkaya, I., & Root, D. (2005). Deciding What to Design: Closing a Gap in Software Engineering Education Invited paper for Education and Training Track of 27th *International Conference on Software Engineering (ICSE 2005)*, May 2005, book chapter to appear.
92. Herbsleb, J.D. & Moitra, D. Global Software Development. *IEEE Software*, March/April 2001. (Special issue, Herbsleb, J.D. & Moitra, D., Eds.)
93. Rocco, E., Finholt, T.A., Hofer, E.C., & Herbsleb, J.D. (2001, April). Out of sight, short of trust Presentation at the Founding *Conference of the European Academy of Management*. Barcelona, Spain.
94. Finholt, T. A., Rocco, E., Brec, D., Jain, N., & Herbsleb, J. D. NotMeeting: A Field Trial of NetMeeting in a Geographically Distributed Organization. *SIGCHI Bulletin*, April 1999.

95. Boyer, D. G., Cortes, M., Herbsleb, J. D., & Handel, Mark J. Virtual Community Presence Awareness. In Proceedings, *CSCW '98 Workshop on Designing Virtual Communities for Work*, Seattle, WA, November 14-18, 1998.
96. Herbsleb, J.D. Hard problems and hard science: On the practical limits of experimentation. (1998). *IEEE TCSE Software Process Newsletter*, No. 11, Winter 1998, 18-21.
97. Herbsleb, J. D. Supporting the emergence of abstractions in software design. (1997). *CHI 97 Workshop on Interactive Systems for Supporting the Emergence of Concepts and Ideas*.
98. Goldenson, D. & Herbsleb, J. (1995). After the appraisal: A systematic survey of process improvement, its benefits, and factors that influence success. Technical Report CMU/SEI-95-TR-009, Carnegie Mellon University.
99. Herbsleb, J., Carleton, A, Rozum, J., Siegel, J., Zubrow, D. (1994). Benefits of CMM-based software process improvement: Initial results. Technical Report CMU/SEI-94-TR-13, Carnegie Mellon University.
100. Herbsleb, J., Zubrow, D., Siegel, J., Rozum, J., Carleton, A. (1994). Software process improvement: State of the Payoff. *American Programmer*, 7, 2-12.

## Funding

---

1. Bosch Corporate Research. \$100,000 (2008).
2. IBM Jazz Faculty grant. \$60,000 (total, 2008-2009).
3. Accenture Technology Labs \$100,000 (total, 2007-2008).
4. Siemens Software Initiative. \$100,000 (2007).
5. National Science Foundation, IIS-0414698. Coordination, communication, and collaboration in open source software development. \$400,000. PI: Herbsleb. Co-PIs: Carley, Kraut, Mockus.
6. National Science Foundation, IIS-0534656. The role of architecture in facilitating design collaboration. \$500,000. PI: Herbsleb. Co-PIs: Garlan, Paulish.
7. Siemens Corporate Research, \$100,000 (2006).
8. IBM Faculty Award, \$40,000 (2005).
9. SEI IR&D. Understanding organizational risk in architectural design. \$246,000. With Bass & Klein.
10. Sloan Foundation. Software Industry Center.

## Selected Press Coverage

---

Open Source Development Models Fall Flat, *Computerworld*, May 12, 2004.  
<http://www.computerworld.com/printthis/2004/0,4814,93109,00.html>

You Can Surf but You Can't Hide, *New York Times*, February 7, 2002.  
<http://www.nytimes.com/2002/02/07/technology/circuits/07HERE.html?ex=1025680685&ei=1&en=f0e9040e3b056fec>

Software Development Goes Global. *Computerworld*, June 26, 2000.  
[http://www.computerworld.com/cwi/story/0,1199,NAV47\\_STO46187,00.html](http://www.computerworld.com/cwi/story/0,1199,NAV47_STO46187,00.html)

Unit of One: The Road not Taken. *Fast Company*, June 2000.  
<http://www.fastcompany.com/online/35/one.html>

## Dissertation Supervision

---

### **Committee Chair or Co-chair**

Marcelo Cataldo (with Kathleen Carley), Institute for Software Research, SCS, CMU.

Uri Dekel, Institute for Software Research, SCS, CMU.

Peter Landwehr (with Kathleen Carley), Institute for Software Research, SCS, CMU.

Patrick Wagstrom (with Kathleen Carley), Engineering and Public Policy, CMU.

### Professional Activities

---

Associate Editor, *ACM Transactions on Software Engineering and Methodology*, 2008-present  
Editorial Board, *Empirical Software Engineering*, 2006-present  
Conference Co-Chair, *Computer-Supported Cooperative Work (CSCW)* 2004  
Program Committee, *International Conference on Software Engineering*, 2008  
Program Committee, *Foundations of Software Engineering (FSE)* 2008  
Program Committee, *Foundations of Software Engineering (FSE)* 2006  
Program Committee, *Foundations of Software Engineering (FSE)* 2004  
Program Committee, *International Conference on Software Engineering (ICSE)* 2003  
Program Co-Chair, *Human-Computer Interaction Consortium (HCIC)* 2002.  
Guest editor, Special issue of *IEEE Software* on Global Software Development (Mar./Apr. 2001)  
Reviewer, ACM Conference on *Computer-Human Interaction (CHI)*  
Reviewer, ACM Conference on *Computer-Supported Cooperative Work (CSCW)*  
Reviewer, *ACM Transactions on Information Systems (TOIS)*  
Reviewer, *IEEE Transactions on Software Engineering*  
Reviewer, *Empirical Software Engineering*  
Reviewer, *Empirical Studies of Programmers*  
Reviewer, *Human-Computer Interaction*  
Reviewer, *IBM Systems Journal*  
Member, Association for Computing Machinery


**CERTIFICATE OF SERVICE**

I, Gladys Tong, hereby certify that on April 8, 2010, I served the foregoing on the following as noted:

**BY E-MAIL**

Heidi Keefe  
Mark Weinstein  
Jeffrey Norberg  
Cooley Godward Kronish LLP  
Five Palo Alto Square  
3000 El Camino Real  
Palo Alto, California 94306-2155  
Tel: (650) 213-0300  
Fax: (650) 213-8158

E-Mail: hkeefe@cooley.com  
E-Mail: mweinstein@cooley.com  
E-mail : jnorberg@cooley.com

  
\_\_\_\_\_  
Gladys Tong  
KING & SPALDING LLP  
333 Twin Dolphin Drive  
Suite 400  
Redwood Shores, CA 94065  
(650) 590-0700





**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

LEADER TECHNOLOGIES, INC.,	)	
a Delaware corporation,	)	
	)	Civil Action No. 1:08-cv-08-862-JJF
Plaintiff-Counterdefendant,	)	
	)	
v.	)	<b>DISCLOSURE OF EXPERT</b>
	)	<b>TESTIMONY FOR JAMES</b>
FACEBOOK, INC.,	)	<b>HERBSLEB, PH.D. PURSUANT</b>
a Delaware corporation,	)	<b>TO FED. R. CIV. P. 26(A)(2)</b>
	)	
Defendant-Counterclaimant.	)	
	)	

**HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY**

Plaintiff Leader Technologies, Inc. (“Leader”) submits the following disclosure of expert testimony for James Herbsleb, Ph.D. pursuant to Federal Rules of Civil Procedure 26(a)(2). This expert is engaged in ongoing refinement of his opinions and expected testimony, and Leader specifically reserves the right to modify or supplement the information contained in this disclosure pursuant to the Federal Rules of Civil Procedure.

I, James Herbsleb, Ph.D., submit the following expert report on behalf of Leader. All opinions and facts stated herein are true and correct to the best of my knowledge. I reserve the right to modify or supplement this disclosure if more information is made available to me.

1. I am a Professor of Computer Science and Director of the Software Industry Center at Carnegie Mellon University.
2. In 1991, I received a M.S. in Computer Science from the University of Michigan. I also have a Ph.D. in Cognitive Social Psychology (1984) and J.D. (1980) from the University of Nebraska.
3. My research focuses on collaborative technologies and practices for global software development. I served as PI on two completed and one ongoing NSF-funded project investigating various aspects of collaborative software engineering. My research interests are in geographically-distributed software engineering, open source software development, collaboration over distance, and tools and technologies that support coordination.
4. I have authored more than 70 publications, including journal publications.
5. The details about my work experience and education are summarized in my curriculum vitae ("CV") attached hereto as Exhibit A, which also contains a list of publications I authored within the last 10 years.
6. I am being compensated for my time as an expert witness for Leader in this litigation at a rate of \$300 an hour, or \$2,500 per day, and \$400 an hour for deposition and testimony at trial. The compensation that I receive is not dependent in any way on the outcome of the litigation.
7. In the past four years I have not testified at trial or at deposition.

8. A list of documents I reviewed in preparation for this report is attached to this report as Exhibit B and Exhibit C. As shown, I have reviewed Dr. Greenberg's and Mr. Hughes' report, including all exhibits attached thereto. I intend to rely upon, and discuss, all material listed in Exhibit B and Exhibit C, including the opinions of Dr. Greenberg and Mr. Hughes and all exhibits attached to their reports, at trial, to the extent they are allowed to testify.

9. My opinion, contained in this report, is based on my education, professional career, and work experience, as well as the materials and deposition transcripts that I have reviewed which are listed in Exhibit B and Exhibit C.

10. For the purposes of this report I am using the following definitions for terms in the claims of United States Patent No. 7,139,761 ("the '761 Patent"), as provided by the Court in this litigation:

Term	Definition
context	environment
component	a computer-related entity, either hardware, a combination of hardware and software, software, or software in execution
many-to-many functionality	two or more users able to access two or more data files
dynamically	automatically and in response to the preceding event

For all other terms, I am applying the plain and ordinary meaning as commonly understood by one of skill in the art.

11. For the purposes of this report I considered a person of skill in the art to be someone with a bachelor's degree or higher in computer science and/or several years of experience in the computer industry.

12. I have been informed that a United States patent is presumed valid. This is because an issued patent has already undergone scrutiny from the United States Patent and Trademark Office ("USPTO"). I further understand that because a patent is presumed valid, the evidentiary burden to invalidate a patent requires clear and convincing evidence.

13. I have been informed that a claimed invention is invalid if it is anticipated. A claimed invention is anticipated if each and every element of the claimed invention is disclosed in a single reference. Therefore, a claim is not anticipated if at least one element of the claim is not disclosed in a single reference.

14. I have been informed that a claimed invention is also invalid if it is obvious. A claimed invention is obvious if a single reference or two or more references combined together disclose all of the elements of the claimed invention. Obviousness is determined by looking at the claimed subject matter as a whole through the eyes of one of ordinary skill in the art at the time the claimed invention was made. Therefore, a claim is not obvious if the references do not disclose at least one element of the claim. Further, a claim is not obvious if there exists no suggestion or motivation to combine the references.

15. I have been informed that a proper prior art reference must be an enabling disclosure. Specifically, a reference must enable one of ordinary skill in the art to make the invention without undue experimentation.

16. Moreover, I have been informed that if a United States patent is used as an alleged prior art reference, it must have been filed before the conception date of the '761 Patent or must

have been published 1 year before the earliest effective filing date. If any other type of reference is used as an alleged prior art reference, it must have been published 1 year before the earliest effective date.<sup>1</sup>

17. I have been informed that if an independent claim is found valid, every claim which depends from the independent claim is also valid.

18. I have been informed that under 35 U.S.C. § 119(e)(1), an application for a patent may rely upon the priority date of a provisional application if the patent application and provisional have the same inventors, the application specifically references the provisional application, the application is filed within 12 months of the provisional application, and the provisional application meets the requirements of the first paragraph of 35 U.S.C. § 112, which states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

19. I understand that a patent is presumed to be entitled to the filing date of its provisional application, especially if this date is used by the USPTO during the prosecution of the patent. I further understand that clear and convincing evidence is required in order to overcome this presumption.

20. I have been informed that secondary considerations are relevant to the determination of whether a product or process was obvious at the time of invention to one of ordinary skill in the art. Secondary considerations include the invention's commercial success,

---

<sup>1</sup> I have been informed there are other situations in which references may be used as prior art. However, based on the references provided by Dr. Greenberg in his report, these are the only relevant rules regarding alleged prior art.

commercial acquiescence (licensing), a long felt but unresolved need, the failure of others, skepticism by experts, praise by others, teaching away by others, recognition of a problem, laudatory statements by the infringer, and copying of the invention by competitors.

21. In my report, I only address the opinions set forth by Dr. Saul Greenberg in his report. If Dr. Greenberg is allowed to supplement his report or testify regarding any matter which is not provided in his report, I reserve the right to address Dr. Greenberg's newly formed opinions once they are made known to me.

22. In my report, I also address the opinions set forth by Mr. James Hughes in his report. If Mr. Hughes is allowed to supplement his report or testify regarding any matter which is not provided in his report, I reserve the right to address Mr. Hughes' newly formed opinions once they are made known to me.

23. In order to aid the Court and jury in understanding my opinion regarding the validity of the '761 Patent, I intend to create demonstrative exhibits for trial. These demonstrative exhibits will include graphical and non-graphical illustrations (such as charts, tables, etc.) of the technology covered by the claims of the '761 Patent (including the file history and provisional application), the references cited by Dr. Greenberg and Mr. Hughes, background of the alleged prior art, and other material which illustrate my opinions

24. I intend to address all of Dr. Greenberg's relevant testimony at trial. To the extent Mr. Hughes is permitted to testify, I also intend to address all of Mr. Hughes' relevant testimony at trial as well. For example, I intend to address Dr. Greenberg's (and Mr. Hughes') testimony regarding any of the opinions provided in his report, including any testimony he gives regarding the subject matter of the '761 Patent, any terminology, the skill of one in the art, the priority date

of the '761 Patent, his analysis regarding the validity of the '761 Patent, and an opinions set forth in my report herein.

25. Dr. Greenberg notes in a footnote that his analysis does not necessarily indicate every single place within a particular prior art reference where a particular claim limitation may be located. For purposes of my report, I have only addressed the opinions provided by Dr. Greenberg in his report, including the citations that he discloses. To the extent that Dr. Greenberg is allowed to testify regarding other citations which are not in his report, I reserve the right to address his newly formed opinions and citations. This same principal applies to Mr. Hughes to the extent he is allowed to testify. In any case, the citations provided in my report are also only exemplary, and do not necessarily indicate every single citation that supports my opinion. To that extent, I reserve the right to rely on any portion of any of the asserted references (defined below), or any portion of the material listed in Exhibit B and Exhibit C, at trial.

26. I have been informed that Facebook is accused of infringing Claims 1, 4, 7, 9, 11, 16, 21, 23, 25, 31 and 32 of the '761 Patent (the "asserted claims").

27. In Dr. Greenberg's report, he splits the asserted claims up into arbitrary elements which are not consistent with the claims as written. To the extent possible, I have addressed Dr. Greenberg's analysis using the correct breakdown of elements, which are provided as separate paragraphs in the claims, rather than the arbitrary breakdown of elements used by Dr. Greenberg.

28. In Dr. Greenberg's report, he mentions United States Patent No. 6,370,538 to Lamping ("the '538 Patent), United States Patent No. 6,308,179 to Petersen ("the '179 Patent"), iManage DeskSite 6.0 User Reference Manual ("the iManage manual"), a paper entitled "A Context File System for Ubiquitous Computing Environments by Christopher Hess ("the Hess

paper”), United States Patent 6,430,575 to Paul Dourish (“the ‘575 Patent”), European Patent Application No. EP1087306 to Hubert (“the ‘306 Patent”), United States Patent No. 7,590,934 (“the ‘934 Patent”), United States Patent No. 6,236,994 to Swartz (“the ‘994 Patent”), United States Patent No. 6,941,313 to Seliger (“the ‘313 Patent”), United States Patent No. 7,346,648 to Seliger (“the ‘648 Patent”), United States Patent No. 6,434,403 to Ausems (“the ‘403 Patent”), and various pages from the Microsoft Computer Dictionary (collectively “the asserted references”). To the extent Dr. Greenberg has provided an opinion that the asserted references invalidate the ‘761 Patent, I disagree with his opinion. It is my opinion, for the reasons set forth herein, that the ‘761 Patent is valid in light of the asserted references.

#### **SUMMARY OF THE ‘761 PATENT**

29. The ‘761 Patent discloses an online collaboration tool that can be employed by collaboration systems to create linked personal and shared workspaces or environments. A user has access to a suite of applications within an environment, allowing the users to access, manipulate, and store data. These environments can be linked together into larger structures to form an online collaboration tool. Users can move among environments on the system and the tool keeps track of their movements. Data created by a user is associated with that user and with the environment in which the data was created. If a user moves from one environment to another, the user can continue to access data created in the first environment, and possibly access additional data available in the second environment. Environments can be shared among users. All data associated with a shared environment is available to all users who access that environment. Actions of users in the shared environment can be seen by other users in that environment. Shared environments provide a flexible mechanism for defining workflows. The online collaboration tool disclosed in the ‘761 patent is extremely effective at supporting



collaboration because the workspaces bring together a suite of tools for a particular type of work, and the data for that work is associated with the tools and with the users who created it. Users have everything they need as soon as they enter the workspace, and shared workspaces bring together the right set of users for a task. The tool supports and tracks users as they move from one workspace to another.

**CONCEPTION DATE OF THE '761 PATENT**

30. It is my understanding that the American patent system is a first-to-invent system, where an inventor is entitled to use the date that he or she conceived of an invention. Under this system, an inventor is considered to have conceived an invention when he or she has a permanent idea of a complete and operative invention, even if the invention has not actually been made. I have been informed that corroborating evidence of conception of the invention is required for an inventor to rely on a conception date.

31. It is my understanding that the inventors of the '761 Patent claim that they conceived of the invention of the '761 Patent by no later than August 19, 1999. An example of corroborating evidence that I have reviewed is the document titled "LEADER Project Functional Specification" and corresponding email dated August 19, 1999 (LTI\_012960-88). After reviewing these documents, it is my opinion that these documents corroborate that the inventors of the '761 Patent had a permanent idea of the complete and operative invention by August 19, 1999.

32. Dr. Greenberg has not challenged the conception date of the '761 Patent. This confirms my opinion that the appropriate conception date of the '761 Patent is August 19, 1999.

**PRIORITY DATE OF THE '761 PATENT**

33. In my opinion, the priority date of the '761 Patent is the filing date of the provisional application, December 11, 2002, because the Provisional Application and '761 Patent Application meet all of the requirements for claiming priority to the filing date of the Provisional Application.

34. The Provisional Application and the '761 Patent Application both identify Jeff R. Lamb and Michael T. McKibben as inventors. The cover page of the '761 Patent contains, under the heading "Related U.S. Application Data" an explicit reference to the Provisional Application.

35. The cover page for the Provisional Application states that it was filed on December 11, 2002. The cover page for the '761 Application states that it was filed on December 10, 2003, less that one year before the filing date of the Provisional Application.

36. My understanding is that the United States Patent and Trademark Office considered the December 11, 2002 filing date of the Provisional Application to be the effective filing date of the '761 Application because it is provided on the cover page of the Provisional Application. My opinion is confirmed with the prosecution history in which the Patent Examiner referenced the filing date of the Provisional Application in a June 3, 2005 Office Action. *See* June 3, 2005 Office Action at 2. In addition, all of the references that were cited by the Examiner were either filed or published before the filing date of the Provisional Application. Thus, the actions of the United States Patent Office, and the prior art cited by the Examiner, is consistent with my opinion that the effective filing date of the '761 Patent is December 11, 2002.

37. In addition, I had a post-doc student in my lab look at the provisional application to determine whether it was possible to make and use a program which would meet the elements of the asserted claims. The post-doc student qualifies as one of skill in the art at the time of the

invention. In approximately 10 hours, he was able to write the code provided as Exhibit C. This code demonstrates that the provisional application enables one of skill in the art to make and use the claimed invention.

38. I saw a live demonstration of an actual program which was built based on the provisional application. During the demonstration, I was able to see the inner working of the product by various "PRINT" commands which were provided in the code. This demonstration also confirmed that one of skill in the art was able to make and use the claimed invention based on the provisional application.

39. Furthermore, in my opinion the Provisional Application contains a sufficient description, in both the numbered paragraphs of the Provisional Application and in the pseudo code attached to it, of each of the asserted claims of the '761 Patent such that one of ordinary skill in the art of computer science could implement the claimed functionality without undue experimentation. It is my opinion that both the provisional application and the '761 Patent contain sufficient disclosure to indicate that the inventors were in possession of the invention. I considered the disclosure as a whole, any citations below are merely exemplary in nature.

40. Dr. Greenberg argues that the Provisional Application has not adequately disclosed "tracking user movement from a first to second context/user environment/workspace, and updating and/or changing metadata associated with the data in response to that movement/access." Greenberg Expert Report, ¶¶76-77. After reviewing of the Provisional Application, it is my opinion that the claim elements referenced in paragraph 76 of Dr. Greenberg's report related to tracking user movements and updating data are disclosed by the Provisional Application. Dr. Greenberg seems to have relied on the fact that some language in the '761 Patent was not included verbatim in the Provisional Application. However, the

Provisional Application includes a comprehensive disclosure which adequately discloses these elements, both through descriptions in the operation of the system and exemplary pseudo code.

41. The Provisional Application states that a goal of the invention is to “provide a communication tool that automatically stores contextual information relating to an item of communication and utilizes that context[] in performance of communication tasks.” Provisional Application at 4. The Provision Application further elaborates on the concept of a context, stating:

**Context** - prior art communications tools do not know the business and/or personal context(s) within which files are created and used. For example, a person may create three files in a word processor, one relating to sales, the second relating to operations and the third relating to his son's football team. However, the word processor itself has no way of knowing to automatically store those three files in at least three different places. Provisional Application at 2.

42. The Provisional Application describes the tracking of the users between contexts when it states that “[a]s users create and change their contexts, the files and applications automatically follow, dynamically capturing those shifts in context.” Provisional Application at 5. The Provisional Application further describes the capturing of information related to content, stating that “[c]ontent is preferably associated with a routing algorithm referred to herein as a webslice. . . the content has an intelligent quality whereby upon a change of structure of the web, the content knows which board or boards it should be on both before and after the change in structure.” Provisional Application at 6. The Provisional Application further provides that “the loc[a]tion of content may be determined by detecting changes in structure, detecting the temporary location of the content on the boards in the routing algorithm before and after the change and adjusting the location of the affected content as part of the change in structure.” Provisional Application at 7.

43. This description is supplemented by the pseudo code included in the Provisional Application. The beginning of the pseudo code includes a number of “import” statements that are instructions to include additional source code referenced in each “import” statement. Provisional Application at 10. Several of these “import” statements, including “import com.leader.persist.\*;” “import com.leader.persist.vbsf\*;” and “import com.leader.osapplication.sessionstate.\*” indicate that the pseudo code is intended to load other source code that facilitates the tracking of a user from one environment to a second environment. *Id.* For example, the “import com.leader.osapplication.sessionstate.\*;” statement indicates that the code maintains track of a users “session state.” Provisional Application at 10. Information related to the user’s session and the state of that session in one example of a method of tracking a user’s interaction with the system. The “WebRelationships” method is a code-based example of combining stored metadata with the tracked location of the user in order to update the metadata associated with user created content on the system. Provisional Application at 15. Again, as noted above, the “VSBF” comment tag denotes samples of used to write metadata relating to a user’s tracked state to underlying database. *Id.* Furthermore, “action.addActionListener (RemoveWebRelationshipActionListener.GLOBAL);” is used to track the movement of a user through his interactions with the system. Provisional Application at 6, line 30. These elements from the Provisional Application adequately disclose tracking a user’s movement as disclosed in the claims of the ‘761 Patent.

44. Dr. Greenberg has also argued that the Provisional Application has not adequately disclosed “creation and storage of ‘metadata.’” After a review of the Provisional Application, it is my opinion that the claim elements referenced in paragraph 79 of Dr. Greenberg’s report related to the creation and storage of data and metadata is adequately disclosed in the Provisional

Application. The Provisional Application includes a comprehensive disclosure which adequately discloses these elements, both through descriptions in the operation of the system and pseudo code.

45. Dr. Greenberg is incorrect in his statement that the Provisional Application teaches away from the use of metadata as in the system claimed in the '761 Patent. Greenberg Expert Report, ¶80. The section referred by Dr. Greenberg merely states that manual metadata tagging which "involve[s] having a knowledge officer view files after they have been stored and create meta-data tags with additional key words" is limited because "no information is contained within the file about the user and context and circumstances of the user at the time the file was created." Provisional Application at 3. The cited section clearly discloses the concept that metadata can be used to store information related to data in a system where these limitations related to manual tagging of data were addressed. Furthermore, it is perplexing how this could be considered to teach away from the use of metadata as in the '761 Patent, as the '761 Patent includes an almost identical copy of the statement relied on. '761 Patent, Col. 2, ll. 50-59.

46. The numbered paragraphs of the Provisional Application and the attached pseudo code adequately describe the "dynamic association" and storage of metadata and data. The Provisional Application states, in a section titled "Description of the Embodiments", that "[a]s users create and change their contexts, the files and applications automatically follow, dynamically capturing those shifts in context." Provisional Application at 5. This passage shows that the Provisional Application describes a process of dynamically associating metadata. The Provisional Application states "[a]lternatively, the loc[a]tion of content may be determined by detecting changes in structure, detecting the temporary location of the content on the boards in the routing algorithm before and after the change and adjusting the location of the affected

content as part of the change in structure.” Provisional Application at 7. This further demonstrates the dynamic association of metadata with data.

47. The pseudo code attached to the Provisional Application describes a system where a user can create data within a user environment/context. The “createRelationshipsSubForm” function includes calls that request and associate user created data. Provisional Application at 15. The portions of the pseudo code labeled with the “VSBF” comment tag are examples of code used as an interface between the code listed in the Provisional Application and a database that is used to store the user-created files and documents. *Id.* These “VSBF” statements show examples of storing and retrieving the metadata. These portions of the pseudo code attached to the Provisional Application would be used to store user-created data for long-term storage.

48. Furthermore, the pseudo code attached to the Provisional Application describes “dynamic association” and storage. The beginning of the pseudo code includes a number of “import” statements that are instructions to include additional source code referenced in each “import” statement. Provisional Application at 10. Several of these “import” statements, including “import com.leader.persist.\*;” “import com.leader.persist.vbsf\*;” and “import com.leader.osapplication.sessionstate.\*” indicate that the pseudo code is intended to load other source code that facilitates the capture and storage of context information. *Id.* The “createRelationshipsSubForm” function includes calls that request metadata related to the user and to user created data. Provisional Application at 15. This portion of the pseudo code is an example of the types of metadata reads and writes needed to implement dynamic association and storage in metadata.

**Dependent Claims**

49. I disagree with Dr. Greenberg's statement that the Provisional Application does not disclose Claims 4 because it does not disclose "a relationship between the user and at least one of an application, application data and user environment." The Provisional Application discloses this, stating that "this invention relates to new structures and methods for creating relationships between users, applications, files and folders." Provisional Application at 1. The "Web Version 1' Working Description" portion of the Provisional Application describes one method for organizing context information as a relationship between a user and the user environment, application, and application data. Provisional Application at 8-10. In particular, the "CIAP Implementation" example in this section of the Provisional Application describes a number of users in terms of the relationships between the Applications, Files, and Folders associated with those users. *Id.* at 9. Moreover, the Provisional Application clearly states "the People, Webs, and Boards become the automatic context for Applications, Files, and Folders." *Id.* at 10. The inclusion of context information defining the relationships between the user and the user's applications, application data, and user environment allows for "the instantaneous reorganization of people and topic associations along with the communications tools." *Id.*

**Claim 7**

50. I disagree with Dr. Greenberg's statement that the Provisional Application does not disclose Claim 7. Dr. Greenberg provides no specific analysis for Claim 7, and has not provided any proof that Claim 7 is not adequately disclosed. In my opinion, the Provisional Application adequately disclosed Claim 7, which describes the association of data created in one context with data created in a second context. For example, the Provisional Application states that one object of the invention is to "automatically store[] contextual information relating to an



item of communication,” to “integrate[] two or more different communication applications,” and to provide a structure for defining relationships between complex collections of data.”

Provisional Application at 4. The Provisional Application also states “[a]lternatively, the loc[a]tion of content may be determined by detecting changes in structure, detecting the temporary location of the content on the boards in the routing algorithm before and after the change and adjusting the location of the affected content as part of the change in structure.”

Provisional Application at 7.

### **Claim 11**

51. I disagree with Dr. Greenberg’s statement that the Provisional Application does not disclose Claim 11 because it does not disclose the concept of users moving and accessing information from more than one user environment. However, as discussed above, the Provisional Application states “[a]s users create and change their contexts, the files and applications automatically follow, dynamically capturing those shifts in context.” Provisional Application at 5. Further, it states that “[c]ontent is preferably associated with a routing algorithm referred to herein as a webslice. . . the content has an intelligent quality whereby upon a change of structure of the web, the content knows which board or boards it should be on both before and after the change in structure.” Provisional Application at 6.

### **Claim 16**

52. Dr. Greenberg has taken the position that “accessing the user environment via a portable wireless device” would “likely have happened with no thought as a consequence of everyday computer use.” *See* Greenberg Expert Report, Ex. C-3 at 17. I find this statement to be inconsistent with regard to Claim 16, which he said was not supported by the Provisional

Application. Greenberg Expert Report, ¶84. Therefore, I do not believe that Dr. Greenberg has provided evidence to show that Claim 16 is not entitled to the priority date.

**Claim 25**

53. I disagree with Dr. Greenberg's statement that the Provisional Application does not disclose Claim 25 because it does not disclose the concept of a context component that captures data associated with multiple workspaces. The Provisional Application states "[a]s users create and change their contexts, the files and applications automatically follow, dynamically capturing those shifts in context." Provisional Application at 5. Further, it states that "[c]ontent is preferably associated with a routing algorithm referred to herein as a webslice...the content has an intelligent quality whereby upon a change of structure of the web, the content knows which board or boards it should be on both before and after the change in structure." Provisional Application at 6.

**Claim 31**

54. I disagree with Dr. Greenberg's statement that the Provisional Application does not disclose "the data and the metadata" or "storage using a relational or object storage methodology" as in Claim 31. The portions of the pseudo code labeled with the "VSBF" comment tag, as noted above, indicate the writing of user data and metadata to a relational database. The storing step recited in Claim 31 will be an automatic function of the database operation.

**Claim 32**

55. I disagree with Dr. Greenberg's statement that the Provisional Application does not disclose facilitating "many-to-many functionality" as in Claim 32. The Provisional Application provides that "this invention relates to new structures and methods for creating

relationships between users, application, files and folders.” Provisional Application at 1.

Further, the Provisional Application describes an example system which facilitates the collaboration of multiple people managing multiple data files. Provisional Application at 6.

### **CUMULATIVE REFERENCES**

56. In my opinion, the prior art references discussed below and cited by Dr. Greenberg are cumulative of the art considered by the Examiner during the prosecution of the ‘761 Patent. For this reason, the ‘761 Patent is valid in light of the prior art discussed below. Notably, Dr. Greenberg did not perform any analysis regarding whether the prior art that he cited was cumulative or not.

57. Dr. Greenberg heavily relies on document management systems in his report. The ‘179 Patent, the ‘538 Patent, the ‘575 Patent, and the iManage manual are all premised on the typical document management system. Yet, document management systems were already considered by the Patent Examiner of the ‘761 Patent. For example, the examiner cited the reference U.S. Patent Application Pub. No. US 2003/0217096 A1 (“McKelvie”) during the prosecution of the ‘761 Patent. McKelvie discloses a system that “can represent the state of a collaborative document such as...document revision...etc.” This system also provides the “application logic that controls editorship and revision mechanisms for the document...” See McKelvie at 46, ¶0411. This type of system is characteristically understood as a document management system.

58. References utilizing document management systems are cumulative art because they employ the same conventional methods of managing information that was previously disclosed and distinguished in the “Background of the Invention” of the ‘761 Patent. First such systems use a tagging approach which requires the user to view the files after they have been

stored. Then the user creates or selects tags with additional information to provide information pertaining to the document. *See* '761 Patent, Col. 2, ll. 55-59. Another conventional method employed by document management systems are folder structures which necessitate the user to manually perform the work of organization and categorization. *See* '761 Patent, Col. 1, ll. 54-64. As demonstrated below all of Greenberg's document management system references use these conventional methods. These references are cumulative and presents the same information that the USPTO already considered.

### **The '179 Patent**

59. The '179 Patent is cumulative art because this patent merely discloses art that was already before the USPTO. Greenberg's own citations demonstrate the invention disclosed in the '179 Patent is dependent on a document management system. For example, Greenberg quotes, "The user is provided access to properties by use of a document management system of the computer system." Greenberg Expert Report, Ex. C-1 at 4. As use of a document management system was already presented and considered by the USPTO, the '179 Patent is a cumulative reference.

60. Furthermore, the '179 Patent merely uses the same tagging approach discussed in the "Background of the Invention" of the '761 Patent. '761 Patent, Col. 2, ll. 55-59. Again Greenberg's own citations demonstrate the invention disclosed in the '179 Patent merely performs the cumulative art of tagging. Namely, "[t]he user attaches selected properties to a document." *See* Greenberg Expert Report, Ex. C-1 at 4. "Properties are tags that can be placed on documents...." *See id.* As this approach was already presented before and considered by the USPTO, the '179 Patent is a cumulative reference.

61. The '179 Patent was classified by the Patent Office as 707/102; 707/2; 707/4; 707/6; 707/8; 707/10; and 707/104. All of these specific classifications were searched by the Patent Examiner during the prosecution of the '761 Patent. See '761 Patent at Cover, Field of Classification Search.

**The '538 Patent**

62. The '538 Patent is cumulative because this patent merely discloses art that was already considered by the USPTO. Greenberg's own citations show the invention disclosed in the '538 Patent is directed to a document management system. For example, Greenberg quotes, "The present invention is directed to a document management system." Greenberg Expert Report, Ex. C-1 at 4. As inventions directed to a document management system were already presented and considered by the USPTO, the '538 Patent is a cumulative reference.

63. Furthermore, the '538 Patent merely provides a user interface for tagging by direct manipulation, and for arranging existing documents, which were previously tagged with properties by a user using the same tagging approach discussed above. While a user is allowed to drag a document from one containment structure to another which may change the properties of the document, this is simply another mechanism for manually applying tags via direct manipulation because the user must drag the document into the appropriate container to change the properties. For example, the '538 Patent states, "the present invention is directed to a user interface which allows flexibility of arrangements while also providing a meaningful organization of documents *based on the existing properties.*" See '538 Patent, Col. 2. ll. 6-9 (emphasis added). As such, the '538 Patent is a cumulative reference.

64. It is noteworthy the '538 Patent was classified by the USPTO as 707/102 which was precisely one of the specific classes of prior art that the Patent Examiner of the '761 Patent indicated was already searched. *See* '761 Patent at Cover, Field of Classification Search.

#### **The '575 Patent**

65. The '575 Patent is cumulative because this patent merely discloses art that was already before the USPTO. Greenberg's own citations show the invention disclosed in the '575 Patent is directed to a document management system. For example, Greenberg quotes, "[t]he present invention relates generally to a collaborative document management system..." *See* Greenberg Expert Report, Ex. C-3 at 1. As references directed to a document management system were already presented and considered by the USPTO, the '575 Patent is a cumulative reference.

66. Furthermore, the '575 Patent merely discloses a system where users can organize and categorize the documents rather than the system doing that work. For example, in the summary section of the patent it states, "[t]he present invention allows users to customize a shared filing structure that is used to categorize a shared collection of documents." *See* '575 Patent, Col. 9, ll. 36-38. Thus, "[u]sers customize the filing structure to express how they want the shared collection of documents to be categorized." *See* '575 Patent, Col. 9, ll. 39-41.

67. Greenberg's own citations show the user performs the steps of creating the customized filing structure and categories. For example, "[t]he category manager 122 receives commands from the application program interface 110 operated by the user. The program interface provides buttons from creating and managing customization to the core filing structure 118...In section 306 in the program interfaces 300 shown in FIGS. 3 and 4, a user may create or delete a selected customized filing structure with command buttons 308 and 309, respectively.

In section 310, a user can add, delete, rename, or move categories defined for a selected filing structure with command buttons, 311, 312, 313, and 314, respectively.” *See* Greenberg Expert Report, Ex. C-3 at 6. This type of info is the same art that was before and considered by the USPTO and is a cumulative reference.

68. The ‘575 Patent is classified in the same class and subclass of prior art that was already searched by the Patent Examiner for the ‘761 Patent. Specifically, the ‘575 Patent’s classification included 707/3 and 707/10. Both of these classifications were listed as classes and subclasses of prior art that the Patent Examiner of the ‘761 Patent searched.

**iManage manual**

69. The iManage manual is cumulative prior art because this reference merely discloses art that was already before and considered by the USPTO. Greenberg states that “iManage is a document management system (DMS that manages and organizes data (documents).” *See* Greenberg Expert Report, Ex. C-2 at 1. As document management systems were already presented and considered by the USPTO, the iManage manual is a cumulative reference.

70. Furthermore, the iManage manual merely uses the same tagging approach discussed in the “Background of the Invention” of the ‘761 Patent. ‘761 Patent, Col. 2, ll. 55-59. Again Greenberg’s citations show that the iManage manual merely performs the cumulative art of tagging. In instructing the users how to enter information about a document, the manual states “[w]henever *you* create a new document, a new version of a document, or a copy of a document, iManage DeskSite prompts *you* to enter profile information for that document...The dialog boxes used to enter profile information for a new document, new versions of documents, and copies of

documents are all customizable by your database administrator.” *See* Greenberg Expert Report, Ex. C-2 at 4.

71. Moreover, Greenberg’s own figures demonstrate that the iManage manual describes the same folder structure previously discussed in the “Background of the Invention” of the ‘761 Patent. *See* Greenberg Expert Report, Ex. C-2 at 6, “Tree Frame” in Figure 2.1. The iManage manual explains that it is the users who create these folders, “which are static groups of documents you can create or share with other users. Folders provide a method for organizing and sharing documents easily.” *See* “Folders and Sub-folders” iManage manual at 25. Furthermore it is the user who decides how to categorize the documents by adding them into these folders. *See* “Adding Documents to a Folder” iManage manual at 29. This method of categorization is strikingly similar to the prior art system disclosed in U.S. Patent No. 6,622,147 (“Smiga”) which states, “[i]n many prior art systems, the user is required to spend time navigating around a user interface to link information to the desired lists or categories to which it pertains.” *See* Smiga, Col. 1, ll. 47-50.

72. As iManage manual is dependent on conventional methods that were previously disclosed to and reviewed by the USPTO, the iManage manual is a cumulative reference.

**FUNDAMENTAL DIFFERENCES BETWEEN CITED ART AND ‘761 PATENT**

73. In his report, Dr. Greenberg provides certain characterizations of the ‘761 Patent. I disagree with these characterizations as noted above in my description of the ‘761 Patent, and as set forth herein.

74. Dr. Greenberg also provides certain characterizations of the background of the art and his own experience in the field (including certain publications). Notably, he does not use any of this information in his analysis of the validity of the ‘761 Patent. Nonetheless, I disagree



with his characterizations to the extent he is referring to the technology claimed in the '761 Patent.

75. Furthermore, Dr. Greenberg relies on certain pages from the Microsoft Computer Dictionary in his characterizations of the background of the art and elsewhere in his report. It does not seem appropriate for Dr. Greenberg to be using a dictionary in his analysis, especially since the definitions of the terms have already been construed by the Court. Moreover, a dictionary is not an enabling disclosure and does not qualify as prior art. To the extent Dr. Greenberg uses the Microsoft Computer Dictionary to support his characterizations, I disagree with Dr. Greenberg's opinion as addressed below and provided herein.

76. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of audit trails. Audit trails are created by software that logs events and actions in a system in order to create a record, typically to show that the system has been used in ways that comply with regulations, standards, or accepted practices. An audit does not create workspaces or environments, and it does not track users from one context to another. Moreover, I do not agree that the '994 Patent is a prior art reference that includes an audit trail which meet the limitations of the asserted claims.

77. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of history systems. Dr. Greenberg is correct that history systems share many similarities with audit systems, and that they create a list of the user's actions. As with audit trails, history systems do not create workspaces or environments, and it does not track users from one context to another. Moreover, I do not agree that the '994 Patent nor the iManage manual are prior art references that include history systems which meet the limitations of the asserted claims.

78. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of server-based bookmark management systems. Such systems store bookmarks on a web server so they can be accessed from any web browser. Bookmarks are not properly considered context, and have no relationship to a particular workspace or environment. A bookmark is merely a URL that a user has chosen to store, which allows any user who can access the bookmark to navigate to the web page identified by the URL. I do not believe bookmarks are relevant to the '761 Patent.

79. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of version control systems. As a document is changed over time, a version control system can be used to store the document before and after each change. Each change creates a new version of the document. The purpose is typically to allow a user to recover from an unwanted change, and go back to an earlier version. For example the "undo" functionality in a word processor allows the user to recover from an undesirable change by going back to the previous version, i.e., the version before the undesired change. As with audit trails and history systems, version control systems do not, however, create workspaces or environments, and it does not track users from one context to another. I do not believe version control systems are relevant to the '761 Patent. Moreover, I do not agree that the '994 Patent nor the iManage manual are prior art references that includes version control systems which meet the limitations of the asserted claims.

80. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of document management systems. As Dr. Greenberg describes, document management systems provide a way for an organization to store and retrieve documents, and such systems often incorporate histories, version control, and audit trails. As I pointed out

above, these three kinds of systems are irrelevant to the '761 Patent. Simply combining all three to create a document management system does not make them relevant. As with the others, a document management system does not create workspaces or environments, and it does not track users from one context to another. Moreover, I do not agree that any of the asserted references are prior art references that include document management systems which meet the limitations of the asserted claims.

81. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of Lifestreams. Lifestreams is a variation on a history system. As with a history system, a time-ordered list of all documents and versions is maintained by the system. In addition, Lifestreams provides a visualization of this list, with the documents arranged on a timeline that fades into the distance as document age increases. Lifestreams also allows the user to select a subset of the documents, and to "replay" the stream. Lifestreams does not create a workspaces or environments, and it does not track users from one context to another. Moreover, I do not agree that any of the asserted references are prior art references that include Lifestream systems which meet the limitations of the asserted claims.

82. To the extent Dr. Greenberg is referring to the '761 Patent, I disagree with his characterization of Groupware Rooms / Teamrooms. Teamrooms are designed to provide an electronic substitute for a physical room a team uses for collaboration. Teamrooms typically provide ways to store documents, communicate, and view artifacts in the room. Teamrooms do not track users from one context to another, or provide access of data created in one context to a user in a second context. Each room provides a self-contained set of data and applications for use by the team. Moreover, I do not agree that any of the asserted references are prior art

references that include Group Rooms / Teamrooms which meet the limitations of the asserted claims.

**THE '761 PATENT IS NOT ANTICIPATED BY THE PRIOR ART**

**Improper Combination of References**

83. Dr. Greenberg's analysis of anticipation is flawed from the outset as he improperly combines two references together as a single reference for a number of the references utilized.<sup>2</sup> It is my understanding that invalidity by anticipation requires that the four corners of a single, prior art document describe every element of the claimed invention, such that a person of ordinary skill in the art could practice the invention without undue experimentation. I also understand that mere reference to another application or patent is not sufficient for a proper incorporation by reference. I understand that to incorporate material by reference into a host document, that host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that specific material is found in the various documents. Furthermore, it is my understanding that the determination of whether an allegedly anticipating document describes material to be incorporated by reference with sufficient particularity should be governed by the standard of one of skill in the art. It is my opinion that the documents described below that allegedly incorporate another document by reference do not identify with sufficient particularity the subject matter which should be incorporated by reference. In addition, Dr. Greenberg fails to provide a proper analysis to determine whether any of the references should be combined. Therefore, Dr. Greenberg has not appropriately attempted to incorporate references for any of the asserted references.

---

<sup>2</sup> The improper combinations include: Lamping '538 and Petersen '179, Seliger '313 and Seliger '648, and Hubert '306 and U.S. Patent No. 7,590,934. Please note that even though Hubert '306 does not incorporate by reference U.S. Patent No. 7,590,934, Dr. Greenberg has improperly asserted that Hubert '306 should encompass U.S. Patent No. 7,590,934.

**The '538 and '179 Patents**

84. I disagree that the '538 Patent and the '179 Patent anticipate the '761 Patent. First, I understand the Dr. Greenberg has based his opinion on a faulty premise. As discussed above, I understand that the '538 Patent and the '179 Patent cannot be considered a single reference because a mere incorporation by reference, without more, is not sufficient to treat the two references as one. Thus, Dr. Greenberg's opinion that the '538 Patent and the '179 Patent anticipate the '761 Patent is wrong because Dr. Greenberg has failed to identify where each and every element of the asserted claims is found in a single reference. Moreover, Dr. Greenberg's reliance on two references is an implicit admission that neither the '538 Patent nor the '179 Patent by themselves discloses each element of the claims. Dr. Greenberg also does not provide a proper obviousness analysis (which is discussed in more detail below). For example, Dr. Greenberg does not specifically identify what should be combined or the reasons for doing so. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

85. I also disagree that the '538 Patent and the '179 Patent invalidate the '761 Patent because the '538 Patent and the '179 Patent are not prior art to the '761 Patent. Specifically, the '538 Patent was filed on November 22, 1999 and did not publish until April 9, 2002. As discussed above, the inventors of the '761 Patent conceived of the invention which resulted in the issuance of the '761 Patent no later than August 19, 1999. Furthermore, as discussed above, the earliest effective filing date of the '761 Patent is December 11, 2002. Because the '538 Patent was not filed before August 19, 1999 and did not publish before December 11, 2001, the '538 is not prior art to the '761 Patent. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

86. In addition, it is my opinion that the '761 Patent is valid in light of the '538 and '179 Patent because Dr. Greenberg fails to provide any specific basis to invalidate a patent. Specifically, Dr. Greenberg's descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, his citations do not support his conclusions. As a consequence, Dr. Greenberg's disclosure has not provided sufficient evidence. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to render the '761 Patent invalid.

87. Moreover, I disagree that the '538 Patent and the '179 Patent invalidate the '761 Patent because the '538 and '179 Patents disclose a document management system. As discussed above, there is a fundamental difference between a document management system and the '761 Patent. Moreover, the USPTO has already considered document management systems during the prosecution of the '761 Patent. Thus, the '538 and '179 Patents are cumulative of the references considered during the prosecution history. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

88. In addition, I disagree that the '538 Patent and the '179 Patent invalidate the '761 Patent because the '538 Patent and the '179 Patent do not disclose each and every element of the asserted claims. With regard to Claim 1, the '538 Patent and the '179 Patent do not disclose a context component nor a tracking component as provided in the '761 Patent.

89. Specifically, Dr. Greenberg's opinion that the '538 and '179 Patents disclose a context component is incorrect for several reasons. First, the concept of a context as claimed in Claim 1 of the '761 Patent is completely absent from the reference. Moreover, the DMS system disclosed in the '538 and '179 Patent does not capture context information associated with user-defined data. Instead, the DMS system of the '538 and '179 Patents requires a user to input a

document properties into the system. For example, even from Dr. Greenberg's own citations, the '538 Patent states that "[t]he present invention pertains to the art of document management systems...where documents are organized and managed in terms of a user level controlled mechanism...These properties are user and document specific in the sense that they are associated with the user which attached the properties..." and "[p]roperties are tags that can be placed on documents..." '179 Patent, Col. 1, ll. 41-51; Col. 9, ll. 55-59. Furthermore, the '179 Patent provides "[t]he user is provided access to properties by use of a document management system of the computer system. The user attaches selected properties to a document." '179 Patent, Col. 6, ll. 64-66.

90. Another of Dr. Greenberg's own citations which illustrates that the '538 Patent teaches away from the '761 patent provides that "the user will alter properties by direct manipulation of the containment structure." '538 Patent, Col. 6, ll. 7-10 (emphasis added). Again, Dr. Greenberg's citation provides that the system "allows the user to alter properties via direct manipulation." Moreover, the '538 Patent provides that "a direct manipulation interface for visualizing document properties is provided" to the user and "[b]y this link principal n will be able to view (i.e. its document handle) the public properties principal 3 has attached to the reference document." '538 Patent, Col. 2, ll. 12-15 (emphasis added). Furthermore, the '538 Patent provides that "if principal 1 (owner of kernel 18a) creates a base document with content, and stores it within DMS A, and principal 2 (owner of kernel 18b) wishes to use that document and organize it in accordance with its own needs, principal 2 can place properties on Reference Document 20b." '538 Patent, Col. 3, ll. 60-64 (emphasis added).

91. At least these citations indicate that the '538 and '179 Patents do not contain a context component as provided in Claim 1 of the '761 Patent because a user is required to attach

or provide properties to a document rather than being captured by the context component of the system. This is the exact opposite of the teachings of the '761 Patent which solves the problem of having to manually enter information about the documents so that user can collaborate in an effective and efficient manner. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54.

92. In addition, Dr. Greenberg fails to show that the '538 Patent or the '179 Patent disclose a context component which dynamically stores user-defined data and metadata on a storage component. First, Dr. Greenberg never identifies where the '538 Patent or '179 Patent discloses dynamically storing, including the preceding event for storage. Moreover, using Dr. Greenberg's own citations, the '538 and '179 Patent teach that the documents are stored outside the system ("[t]he content of the document is stored at a location outside of the document management system." '179 Patent, Col. 7, ll. 1-3; [d]ocument themselves do not live in DMS...the content is actually relayed from some external repository." '179 Patent, Col. 15, ll. 32-39. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

93. Furthermore, the '538 and the '179 Patents do not disclose a tracking component as recited in Claim 1 of the '761 Patent. In his report, Dr. Greenberg fails to point out any disclosure in the '538 and '179 Patents which disclose a tracking component which tracks a change of the user from the first context to a second context. Instead, again using the citations of Dr. Greenberg, the '538 and '179 Patent discloses "a movement mechanism designed to move the representation of the first document, stored in the first containment structure to a location in the second containment structure." '538 Patent, Col. 2, ll. 19-28. The '538 and '179 Patents are completely silent, and therefore do not teach, tracking a change of the user from a first context to a second context. In fact, the teachings of the '538 and '179 Patents illustrate that the user is



irrelevant, as the “movement mechanism” only focuses on the document, not who is moving it. ‘538 Patent, Col. 7, l. 62 - Col. 8, l. 3. In addition, Dr. Greenberg has not described the limitation of the tracking component requiring the user to access the data from the second context. This is because the ‘538 and ‘179 Patents do not teach a user accessing a document from a second context, as there is no sense of context as an environment disclosed in the ‘538 Patent or the ‘179 Patent. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

**Claim 4**

94. As discussed above, Claim 1 of the ‘761 Patent is valid in light of the ‘538 Patent and the ‘179 Patent. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the ‘538 Patent and the ‘179 Patent. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

95. Furthermore, I disagree with Dr. Greenberg’s opinion that the ‘179 Patent discloses the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. As discussed above, the ‘538 Patent and the ‘179 Patent teach a DMS system which requires a user to input document properties into the system. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

**Claim 7**

96. As discussed above, Claim 1 of the ‘761 Patent is valid in light of the ‘538 Patent and the ‘179 Patent. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the ‘538 Patent and the ‘179 Patent. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

97. Furthermore, I disagree with Dr. Greenberg's opinion that the '538 Patent discloses the association of data created in the first context with data created in the second context. Dr. Greenberg's citations to the '538 Patent discloses a process whereby a user manually moves a document from one project to another project. Greenberg Expert Report, Ex. C-1 at 9-10. This process differs from the method of Claim 7 for at least two important reasons. First, the process disclosed in the '538 Patent requires manual intervention by the user for an association to take place, while the association performed by the method of Claim 7 is performed automatically without user intervention. Second, I disagree with Dr. Greenberg's assertion that the containment structure disclosed in the '538 Patent is a "context" as defined for use in this case. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate Claim 7 of the '761 Patent.

#### **Claim 9**

98. I disagree with Dr. Greenberg's opinion that the '538 Patent and the '179 Patent invalidate Claim 9 of the '761 Patent. Specifically, I disagree that the '538 Patent and the '179 Patent disclose the computer-executable act of creating data within a user environment of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. The '538 Patent and the '179 Patent teach a DMS system which is found on a local network. The '538 Patent and the '179 Patent do not teach a system which is hosted on the Internet. None of Dr. Greenberg's citations indicate that the DMS system is hosted on the Internet. Instead, the citations provide that web pages may be found on the Internet, and then brought into the DMS. For example, "[t]hese document may be found on...the word wide web" and "a web page found by the principal... [may] be brought into the DMS document space." '538 Patent, Col. 3, ll. 29-36; '179 Patent,

Col. 2, ll. 3-5 (emphasis added). Moreover, none of Dr. Greenberg's citations teach that data is created within a user environment of a web-based computer platform via user interaction with the user environment. Instead, the citations teach that content is created in a different system, and that properties of the document may be brought into the DMS document space. For instance, "[t]he document, for example, may be a document which the principal created, it may be an e-mail sent or received by the principal, a web page found by the principal...or any other form of electronic data...brought into the DMS document space." '538 Patent, Col. 3, ll. 29-36 (emphasis added).

99. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 1 into his analysis of Claim 9. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

100. With regard to the second element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

101. Again, with regard to the third element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

102. Again, with regard to the fourth element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 and Claim 4, or duplicates the same analysis and citations from Claim 1 and Claim 4. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 (and Claim 4) and Claim 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

103. Moreover, the citations provided by Dr. Greenberg do not teach that the user employs at least one of the application and data from the second environment. Instead, the '538 Patent and '179 Patent teach that different users provide different properties which results in different access to document. For example, the '179 Patent provides that "[p]roperty sets of different users are managed independently and are therefore not immediately accessible to each other unless explicitly requested" and "[b]y placement of these properties, principal 2 can

retrieve the base document in a manner different that envisioned by principal 1.” ‘179 Patent, Col. 7, ll. 17-19; ‘538 Patent, Col. 4, ll. 23-25. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

#### **Claim 11**

104. As discussed above, Claim 11 of the ‘761 Patent is valid in light of the ‘538 Patent and the ‘179 Patent. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the ‘538 Patent and the ‘179 Patent. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

105. Furthermore, I disagree with Dr. Greenberg’s opinion that the ‘538 and ‘179 Patents disclose indexing the content of a user environment such that a plurality of users can access the context from an associated plurality of user environments. Dr. Greenberg’s report and the relevant portions of Exhibit C-1 do not discuss at all the concept of an association between a first user environment and the associated plurality of user environments, and this concept is absent from the citations that Dr. Greenberg makes to the ‘538 and ‘179 Patents. Greenberg Expert Report at ¶¶44-46; Ex. C-1 at 14-15. In addition, Dr. Greenberg’s report cites to no portion of the ‘538 and ‘179 Patents that disclose multiple users accessing content from multiple user environments. Greenberg Expert Report, Ex. C-1 at 14. Dr. Greenberg’s citation to the ‘179 Patent only discloses that a document can appear in multiple places in different directory listings, not that the document can be viewed in different user environments. ‘179 Patent, Col. 13, l. 17. Dr. Greenberg’s citation to the ‘538 Patent likewise discloses that documents can “in essence” appear to be located a variety of different physical computers. ‘538 Patent, Col. 4, l. 37. Again, this citation fails to disclose users accessing content from multiple user

environments. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate Claim 11 of the '761 Patent.

**Claim 16**

106. As discussed above, Claim 16 of the '761 Patent is valid in light of the '538 Patent and the '179 Patent. Because Claim 16 is dependent on Claim 9, Claim 16 is also valid in light of the '538 Patent and the '179 Patent. Dr. Greenberg acknowledges that the '538 Patent and the '179 Patent do not disclose accessing a user environment from a portable wireless device. Greenberg Expert Report, Ex. C-1 at 15-16. As mentioned below, I disagree with Dr. Greenberg's opinion that access from a portable wireless device would have been obvious in December of 2003. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate Claim 16 of the '761 Patent.

**Claim 21**

107. I disagree with Dr. Greenberg's opinion that the '538 Patent and the '179 Patent invalidate Claim 21 of the '761 Patent. Specifically, I disagree that the '538 Patent and the '179 Patent disclose the concept of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. The '538 Patent and the '179 Patent teach a DMS system which is found on a local network. The '538 Patent and the '179 Patent do not teach a system which is hosted on the Internet. In addition, the '538 Patent and the '179 Patent do not disclose the actions of creating data related to user interaction with an application and dynamically associating metadata with the created data. My analysis of Dr. Greenberg's report addressing Claims 1 and 9 thoroughly discusses both of these concepts.

108. Dr. Greenberg's analysis for Claim 21 does not address any new material beyond that which he discussed with respect to Claims 1, 9, and 11. The only discussion contained in Dr. Greenberg's chart for this claim contains references to other portions of his report. Greenberg Expert Report, Ex. C-1 at 16-17. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 21 because, at the very least, Claims 1, 9 and 11 describe computer systems and Claim 21 describes a computer-readable medium containing computer instructions. Claim 21 also contains different limitations than Claims 1, 9 and 11. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

### **Claim 23**

109. I disagree with Dr. Greenberg's opinion that the '538 Patent and the '179 Patent invalidate Claim 23 of the '761 Patent. For example, I disagree that the '538 Patent and the '179 Patent disclose a web-based server. The '538 Patent and the '179 Patent teach a DMS system which is found on a local network. The '538 Patent and the '179 Patent do not teach a system which is hosted on the Internet. None of Dr. Greenberg's citations indicate that the DMS system is hosted on the Internet. Instead, the citations provide that web pages may be found on the Internet, and then brought into the DMS. These citations, including "a web page found by the principal... [may] be brought into the DMS document space" describe the process by which a web page can be stored in a DMS and not that the disclosed DMS is itself a web-based product. '538 Patent, Col. 3, ll. 29-36; '179 Patent, Col. 2, ll. 3-5 (emphasis added). Moreover, none of Dr. Greenberg's citations teach that data is created within a user environment of a web-based computer platform via user interaction with the user environment. Instead, the citations teach

that content is created in a different system, and that document may be brought into the DMS document space. For instance, “[t]he document, for example, may be a document which the principal created, it may be an e-mail sent or received by the principal, a web page found by the principal...or any other form of electronic data...brought into the DMS document space.” ‘538 Patent, Col. 3, ll. 29-36 (emphasis added).

110. In addition, for a majority of the elements of Claim 23, Dr. Greenberg does not provide any new citations of analysis but rather merely references the analysis he provided from Claim 1. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 23 because Claim 1 and Claim 23 describe different systems that perform different functions and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

111. The first element of Claim 23 discloses a computer-implemented context component of a web-based server for defining a first user workspace. As I mentioned above, the ‘538 Patent and the ‘179 Patent do not disclose a web-based server. In addition, these references do not disclose a context component for defining user workspaces. All of the references to the ‘538 and ‘179 Patents cited to by Dr. Greenberg disclose users defining properties of documents and users placing documents into “containers.” Greenberg Expert Report, Ex. C-1 at 17-19. However, none of these references describe a computer-implemented context component, a piece of software that is used to define a user workspace on a web-based server. With regard to the second element of Claim 23, Dr. Greenberg cites to two portions of the ‘538 Patent that describe that some commercial software “understand DMS protocols for storing, retrieving and otherwise



interacting with” a DMS. Greenberg Expert Report, Ex. C-1 at 19. Neither of these references discuss user workspaces in a web-based system, or the process of assigning applications to a user workspace in a web-based system. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid.

112. Again, with regard to the third, fourth and fifth elements of Claim 23, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 23 because Claim 1 and Claim 23 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

113. Moreover, the citations provided by Dr. Greenberg do not teach that the user accesses the data from the second workspace. Instead, the ‘538 Patent and ‘179 Patent teach that different users provide different properties which results in different access to document. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

#### **Claim 25**

114. As discussed above, Claim 23 of the ‘761 Patent is valid in light of the ‘538 Patent and the ‘179 Patent. Because Claim 25 is dependent on Claim 23, Claim 25 is also valid in light of the ‘538 Patent and the ‘179 Patent. For at least these reasons, the ‘538 Patent and the ‘179 Patent do not invalidate the ‘761 Patent.

115. Furthermore, I disagree with Dr. Greenberg's opinion that the '538 and '179 Patents disclose a context component capturing data associated with the relationship between a first user workspace and other user workspaces. Dr. Greenberg's report and the relevant portions of Exhibit C-1 do not discuss a component capturing relationship data. Instead, the cited portions of the '538 and '179 Patents disclose users manually creating an association between data and a document. Greenberg Expert Report, Ex. C-1 at 20-22. These references do not disclose two important portions of Claim 25. First, they describe a manual, or user-defined, process of associating data that is distinctly different from the context component that automatically captures relationship data as disclosed in Claim 25. Second, the data stored by the cited portions of the '538 and '179 Patents is data associated with the document and not data associated with the relationship between one user workspace and a second user workspace. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate Claim 25 of the '761 Patent.

**Claim 31**

116. As discussed above, Claim 23 of the '761 Patent is valid in light of the '538 Patent and the '179 Patent. Because Claim 31 is dependent on Claim 23, Claim 25 is also valid in light of the '538 Patent and the '179 Patent. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the '761 Patent is invalid. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

**Claim 32**

117. As discussed above, Claim 23 of the '761 Patent is valid in light of the '538 Patent and the '179 Patent. Because Claim 32 is dependent on Claim 23, Claim 25 is also valid in light of the '538 Patent and the '179 Patent. Moreover, Dr. Greenberg has failed to provide

sufficient evidence to prove that the '761 Patent is invalid. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

### **iManage**

118. I disagree that the iManage manual anticipates the '761 Patent. First, the iManage manual cited by Dr. Greenberg is not prior art because it is not an enabling disclosure. Specifically, the iManage manual does not teach one of skill in the art how to make the product. Instead, the iManage manual is merely a reference tool used to illustrate how the product works. There is no description on how to build the product which makes sense because the company that owns the product would not want to teach competitors how to make competing products. In fact, Dr. Greenberg does not assert that the iManage manual is an enabling disclosure. Instead, he merely notes that iManage described an actual working product that was available for purchase and use. The fact that the product was working does not teach one of skill how to make the product. Indeed, the iManage Manual states, "the iManage DeskSite User Reference Manual is intended for end users of iManage DeskSite." *See* iManage manual at 11 (emphasis added). Furthermore, the product is sold as a software bundle without access to the actual components and source code that are used to build the product. To determine how to build the product by purchasing it off of the shelf would take a great deal of reverse engineering, and even then, it is highly unlikely that one of skill would be able to understand how the product was built. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to prove that the iManage document is prior art and anticipates the '761 Patent.

119. Furthermore, Dr. Greenberg fails to provide sufficient proof required to invalidate a patent. Specifically, Dr. Greenberg's descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, his citations do not

support his conclusions. Furthermore, the basis of Dr. Greenberg's assertions are inconsistent. For example, Dr. Greenberg relies on different independent embodiments for each claim element. As result, it is indistinguishable which embodiments correspond together for a claim. For example, his claim chart for Claim 1 asserts that the iManage DeskSite is the computer-implemented network based-system, the context component, the tracking component and the first context. In another example, Dr. Greenberg differentiates the term "documents" from the term "context" by stating that "documents" are user data, while "contexts" are separate applications, computers and/or locations. *See* Greenberg Expert Report, ¶36. Yet inexplicably, Dr. Greenberg also asserts that the term "context" can also be different versions of documents. *See* Greenberg Expert Report, Ex. C-2 at 8. Furthermore, as mentioned above the basis for Dr. Greenberg's assertion is based on inconsistent interpretation of the terms of the '761 Patent. For example, Dr. Greenberg asserts that "a change of the user from the first context to a second context" means "from the first application to the second application or from the first location to the second location." *Id.* at 7. Dr. Greenberg goes on to state that "MANAGE32" as an example of the first application context and "WINWORD" as an example of the second application context. *Id.* Notably, MANAGE32 is merely the iManage DeskSite itself while "WINWORD" refers to Microsoft Word. For the next element of the same claim Dr. Greenberg completely changes the second context to mean "the activities on a document in the history system, the documents associated with the new version."<sup>3</sup> *Id.* at 9. Furthermore, Dr. Greenberg does not explain what is the corresponding first context for this incoherent example. As a consequence, Dr. Greenberg's disclosure has not provided sufficient evidence. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to render the '761 Patent invalid.

---

<sup>3</sup> "wherein the user accesses the data from the second context."

120. Moreover, I disagree that the iManage manual invalidates the '761 Patent because the iManage manual discloses a document management system. As discussed above, there is a fundamental difference between a document management system and the '761 Patent. Moreover, the USPTO has already considered document management systems during the prosecution of the '761 Patent. Thus, the iManage manual is cumulative of the references considered during the prosecution history. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

121. Dr. Greenberg's opinion that the iManage manual the system disclosed in the '761 Patent is wrong for several reasons. Generally, the iManage manual discloses a system which stores files according to directory hierarchy which must be manually inputted by a user. '761 Patent, Col. 2, ll. 18-23. This is the exact opposite of the teachings of the '761 Patent which provides that directory hierarchies are inefficient for collaboration purposes. Moreover, the '761 Patent solves the problem of having to manually enter information about the documents. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the iManage manual is completely different than, and thus does not invalidate, the '761 Patent.

122. In addition, I disagree that the iManage manual invalidates the '761 Patent because the iManage manual does not disclose each and every element of the asserted claims. With regard to Claim 1, the iManage manual does not disclose a context component nor a tracking component as provided in the '761 Patent.

123. The iManage manual does not teach a context component as recited in Claim 1 of the '761 Patent. In fact, the concept of a context is completely absent from iManage system as it is merely a system which manages documents and does not provide the user with an environment or workspace to interact. Moreover, none of the citations that Dr. Greenberg provides discloses

that the iManage system contains a context component as provided in Claim 1 of the '761 Patent. This is because the iManage manual does not describe the inner workings of the product. It is completely silent as to how any information is captured and how it is stored (notably metadata does not appear anywhere within the iManage user manual). Furthermore, it is unclear how the iManage system populates any of its information, where the information comes from, and where it is eventually stored. In any case, the iManage manual does not disclose a context component which captures context information associated with user-defined input (especially since the concept of a context (as environment) is completely absent from the iManage manual). Moreover, the other citations that Dr. Greenberg provides does not support his opinion because the iManage manual teaches that first a user must create folders and the properties for that folder. iManage manual at 16. Then a user must choose which particular folder and file with which to put the data, and it further teaches the user to enter profile information manually before the document can be saved on to the system illustrating that there is no context component as recited in Claim 1 of the '761 Patent. *Id.* at 53. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

124. Moreover, the iManage manual does not teach a tracking component as recited in Claim 1 of the '761 Patent. Again, the iManage manual is completely silent as to the inner workings of the product so it is not possible to determine how data is collected, what data is collected, where data is collected from or where it is stored. Furthermore, nothing in the iManage manual suggests that the product tracks a user moving from a first context to a second context. The iManage manual teaches that the product is document centric. As previously revealed, Dr. Greenberg is unable to particularly state what in the iManage manual is supposed to be the tracking component. Instead, Dr. Greenberg vaguely asserts iManage DeskSite itself is

the tracking component. *See* Greenberg Expert Report, Ex. C-2 at 7. Many of the citations used by Dr. Greenberg to assert the existence of a tracking component are the same as the citations the ones he used when describing the context component which renders his analysis nonsensical. Furthermore, rather than tracking user activity, Dr. Greenberg's own citations state "[t]he Document History tab displays the activity record for a document. iManage manual at 83. The fact that a user moves from one context to another is not taught. Furthermore, the iManage manual does not teach that a user can access data from a second context. Instead, the iManage system is completely devoid of any contexts as recited in Claim 1 of the '761 Patent. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

**Claim 4**

125. As discussed above, Claim 1 of the '761 Patent is valid in light of the iManage manual. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the iManage manual. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

126. Furthermore, I disagree with Dr. Greenberg's opinion that the iManage manual discloses the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. In fact, the iManage manual does not teach the concept of context at all. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

**Claim 7**

127. As discussed above, Claim 1 of the '761 Patent is valid in light of the iManage manual. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the iManage manual. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

128. Furthermore, I disagree with Dr. Greenberg's opinion that the iManage manual discloses wherein the data created in the first context is associated with data created in the second context. As discussed above, the iManage manual does not teach the concept of context, much less the ability to associated data created in two contexts together. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

**Claim 9**

129. I disagree with Dr. Greenberg's opinion that the iManage manual invalidates Claim 9 of the '761 Patent. Specifically, I disagree that the iManage manual discloses the computer-executable act of creating data within a user environment of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. The iManage manual teaches a DMS system which is found on a local network. The iManage manual does not teach a system which is hosted on the Internet. None of Dr. Greenberg's citations indicate that the DMS system is hosted on the Internet. Instead, the iManage manual describes a software application that runs on a Client PC. iManage manual at 18. Many of Dr. Greenberg's citations are for a different and separate product called iManage WorkSite. Any details of iManage WorkSite are a mystery. Yet, Dr. Greenberg regularly relies on the "iManage WorkSite Web Component server," "WorkSite box," and "iManage Work-Site." *See* Greenberg Expert Report, Ex. C-2 at 13. There are no explanations of how functionalities from another product "discloses user environments on a web-based computing platform" as asserted by Dr. Greenberg. Indeed on its face, the iManage WorkSite Web Component server seems to be only used for sending emails, a functionality that is not relevant to any of the claims. *See* iManage manual at 75. Moreover, the iManage manual provides no descriptions of the inner workings of the iManage WorkSite Web Component server,



“WorkSite box,” or “iManage Work-Site.” Furthermore, none of Dr. Greenberg’s citations teach that data is created within a user environment of a web-based computer platform via user interaction with the user environment. For example, Dr. Greenberg merely states that “[t]he iManage Desktop also contains an address for accessing the web.” *See* Greenberg Expert Report, Ex. C-2 at 13.

130. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 1 into his analysis of Claim 9. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. For example, Dr. Greenberg’s assertion that the iManage manual teaches a web-based computing platform is inconsistent with his previous citation of Figure 1.1 for Claim 1. *See* Greenberg Expert Report, Ex. C-2 at 1. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

131. With regard to the second element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. For example, Dr. Greenberg fails to define what he asserts to be a “user environment.” The term “user environment” is not used in Claim 1. As a result, Dr. Greenberg’s method of merely incorporating by reference results in inconsistencies as he seems to define “application” and “user environment” as the same thing. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is

my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid.

Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

132. Again, with regard to the third element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

133. Again, with regard to the fourth element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 and Claim 4, or duplicates the same analysis and citations from Claim 1 and Claim 4. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 (and Claim 4) and Claim 9 are directed to different systems and contain different limitations. For example, Dr. Greenberg fails to define what he asserts to be the first and second "user environments," "application," and "employs." All of which are terms not used in Claim 1. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 11**

134. As discussed above, Claim 9 of the '761 Patent is valid in light of the iManage manual. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the

iManage manual. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

135. Furthermore, I disagree with Dr. Greenberg's opinion that the iManage manual discloses indexing context of the user environment such that a plurality of users can access the content from an associated plurality of user environments. As discussed above, the iManage manual does not teach the concept of user environments. Furthermore, the iManage manual teaches a DMS system that is document centric. Dr. Greenberg own citations state, "profile searches are searches of the database based on a document's profile information." See Greenberg Expert Report, Ex. C-2 at 16. Here Dr. Greenberg asserts that "user environments" are applications or locations. Not only is this wrong, both definitions are also inconsistent with each other. Furthermore, Dr. Greenberg never asserts that iManage discloses "an associated plurality of user environments." Instead, he merely declares that, [t]hrough this document number the document can be located and/or accessed by a plurality of different users in a different user environment." See *id.* at 16. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

#### **Claim 16**

136. As discussed above, Claim 9 of the '761 Patent is valid in light of the iManage manual. Because Claim 16 is dependent on Claim 9, Claim 16 is also valid in light of the iManage manual. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

137. Furthermore, I disagree with Dr. Greenberg's opinion that the iManage manual discloses accessing the user environment via a portable wireless device. Dr. Greenberg's citation of iManage Portable, is misplaced as it has no relation to the "portable wireless device" of Claim

16. Instead, iManage Portable is a mode of operation that allows users to continue to work on their PC using the iManage DeskSite application while disconnected from the network. *See* iManage manual at 173. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

#### **Claim 21**

138. I disagree with Dr. Greenberg's opinion that the iManage manual invalidates Claim 21 of the '761 Patent. First, Dr. Greenberg continues to use an incomplete analysis to support his assertions. For example, he fails to state what "computer program" and on what "system" forms the basis of his computer-readable medium assertion. Furthermore, I disagree that the iManage manual discloses the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. The iManage manual teaches a DMS system which is found on a local network. The iManage manual does not teach a system which is hosted on the Internet. None of Dr. Greenberg's citations indicate that the DMS system is hosted on the Internet. Instead, the iManage manual teaches a software application that runs on a Client PC. iManage manual at 18. Dr. Greenberg citations are inapposite. For example, the "iManage WorkSite Web Component server" is for a completely different product. There are no explanations of how functionalities from another product "discloses user environments on a web-based computing platform" as asserted by Dr. Greenberg. Indeed on its face, the iManage WorkSite Web Component server seems to be only used for sending emails, a functionality that is not relevant to any of the claims. *See* iManage manual at 75. Moreover, the iManage manual provides no descriptions of the inner workings of the iManage WorkSite Web Component server, "WorkSite box," or "iManage Work-Site." Furthermore, none of Dr. Greenberg's citations teach that data is created within a

user environment of a web-based computer platform via user interaction with the user environment. For example, Dr. Greenberg merely states that “[t]he iManage Desktop also contains an address for accessing the web.” Furthermore, Dr. Greenberg’s assertion that iManage is a web-based computing platform is inconsistent with his previous citations for claim 1. *See* Greenberg Expert Report, Ex. C-2 at 1.

139. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 9 into his analysis of Claim 21. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 21 because Claim 9 and Claim 21 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

140. With regard to the second element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 and Claim 21 are directed to different systems and contain different limitations. For example, Dr. Greenberg fails to define what he asserts to be a “user workspace.” The term “user workspace” is not used in Claim 9. As a result, Dr. Greenberg’s method of merely incorporating by reference results in inconsistencies as he seems to define “application” and “user workspace” as the same thing. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

141. Again, with regard to the third element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 and Claim 21 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

142. Again, with regard to the fourth element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to different systems and contain different limitations. For example, Dr. Greenberg fails to define what he asserts to be the first and second "user workspaces," "application," and "employs." All of which are terms not used in Claim 9. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

143. Again, with regard to the fifth element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 11 or duplicates the same analysis and citations from Claim 11. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 11 is directed to different systems and contain different limitations. For example, Dr. Greenberg fails

to define what he asserts to be “user workspace,” which is a term not used in Claim 11. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

**Claim 23**

144. I disagree with Dr. Greenberg’s opinion that the iManage manual invalidates Claim 23 of the ‘761 Patent. Furthermore, I disagree that the iManage manual discloses the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. The iManage manual teaches a DMS system which is found on a local network. The iManage manual does not teach a system which is hosted on the Internet. None of Dr. Greenberg’s citations indicate that the DMS system is hosted on the Internet. Instead, the iManage manual teaches a software application that runs on a Client PC. iManage manual at 18. Dr. Greenberg citations are inapposite. For example the “iManage WorkSite Web Component server” is for a completely different product. There are no explanations of how functionalities from another product “discloses user environments on a web-based computing platform” as asserted by Dr. Greenberg. Indeed on its face, the iManage WorkSite Web Component server seems to be only used for sending emails, a functionality that is not relevant to any of the claims. See iManage manual at 75. Moreover, the iManage manual provides no descriptions of the inner workings of the iManage WorkSite Web Component server, “WorkSite box,” or “iManage Work-Site.” Furthermore, Dr. Greenberg’s assertion that iManage is a web-based computing platform is inconsistent with his previous citations for Claim 1. See Greenberg Expert Report, Ex. C-2 at 1.

145. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 1 into his analysis of Claim 23. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 23 because Claim 1 and Claim 23 are directed to different systems and contain different limitations. Furthermore, Dr. Greenberg continues to use an incomplete analysis to support his assertions, as he merely cites to his analysis of Claim 9, another deficient analysis. For example, the WorkSite Web Component Server does not have any relation to Dr. Greenberg's manufactured terms of "application workspace", "location workspace," "version workspace," and "search workspace." Moreover, none of Dr. Greenberg's citations teach that the system assigns one or more applications to the first user workspace. Indeed, the iManage manual does not teach a user workspace at all. Furthermore, there is nothing that discloses that these third-party applications are assigned to Dr. Greenberg's contrived "application workspace", "location workspace," "version workspace," or "search workspace." In a further example, Dr. Greenberg declares that the storage component of a web-based server is an iManage Library. Yet, an iManage Library is not a storage component of any of Dr. Greenberg's asserted "web-based servers." To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

146. Again, with regard to the second element of Claim 23, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claims 1 and 9 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 23 because Claim 1 is directed to different systems and contain different limitations. For example, Dr. Greenberg fails



to define what he asserts to be “user workspace,” which is a term not used in Claim 1. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

**Claim 25**

147. As discussed above, Claim 25 of the ‘761 Patent is valid in light of the iManage manual. Because Claim 25 is dependent on Claim 23, Claim 23 is also valid in light of the iManage manual. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the ‘761 Patent is invalid. For at least these reasons, the iManage manual does not invalidate the ‘761 Patent.

148. Furthermore, I disagree with Dr. Greenberg’s opinion that the iManage manual discloses that the context component captures relationship data associated with a relationship between a first user workspace and at least one other user workspace. As discussed above, the iManage manual does not teach the concept of a context and is document centric. For at least these reasons, the iManage manual does not invalidate the ‘761 Patent.

**Claim 31**

149. As discussed above, Claim 31 of the ‘761 Patent is valid in light of the iManage manual. Because Claim 31 is dependent on Claim 23, Claim 23 is also valid in light of the iManage manual. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the ‘761 Patent is invalid. Furthermore, I disagree with Dr. Greenberg’s opinion that the iManage Library is a storage component of any of Dr. Greenberg’s asserted “web-based servers.” For at least these reasons, the iManage manual does not invalidate the ‘761 Patent.

**Claim 32**

150. As discussed above, Claim 32 of the '761 Patent is valid in light of the iManage manual. Because Claim 32 is dependent on Claim 23, Claim 23 is also valid in light of the iManage manual. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the '761 Patent is invalid. For at least these reasons, the iManage manual does not invalidate the '761 Patent.

#### **The '575 Patent**

151. I disagree that the '575 Patent anticipates the '761 Patent. First, I disagree that the '575 Patent invalidate the '761 Patent because the '575 Patent is not prior art to the '761 Patent. Specifically, the '575 Patent was filed on September 10, 1999 and did not publish until August 6, 2002. As discussed above, the inventors of the '761 Patent conceived of the invention which resulted in the issuance of the '761 Patent no later than August 19, 1999. Furthermore, as discussed above, the earliest effective filing date of the '761 Patent is December 11, 2002. Because the '575 Patent was not filed before August 19, 1999 and did not publish before December 11, 2001, the '575 Patent is not prior art to the '761 Patent. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

152. In addition, it is my opinion that the '761 Patent is valid in light of the '575 Patent because Dr. Greenberg does not provide sufficient proof to invalidate a patent. Specifically, Dr. Greenberg's descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, his citations do not support his conclusions. As a consequence, Dr. Greenberg's disclosure has not provided sufficient evidence. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to render the '761 Patent invalid.

153. Moreover, I disagree that the '575 Patent invalidates the '761 Patent because the '575 Patent discloses a document management system. As discussed above, there is a fundamental difference between a document management system and the '761 Patent. Moreover, the USPTO has already considered document management systems during the prosecution of the '761 Patent. Thus, the '575 Patent is cumulative of the references considered during the prosecution history. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

154. Dr. Greenberg's opinion that the '575 Patent discloses the system described in the '761 Patent is incorrect for several reasons. Generally, the '575 Patent discloses an application program interface which alters the views of documents depending on how a user defines the filing structure. This is the exact opposite of the teachings of the '761 Patent which solves the problem of having to manually enter information about the documents so that user can collaborate in an effective and efficient manner. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the '575 Patent is completely different than, and thus does not invalidate, the '761 Patent.

155. In addition, I disagree that the '575 Patent invalidates the '761 Patent because the '575 Patent does not disclose each and every element of the asserted claims. With regard to Claim 1, the '575 Patent does not disclose a context component nor a tracking component as provided in the '761 Patent.

156. Specifically, the '575 Patent does not disclose a context component as recited in Claim 1. In fact, the '575 Patent does not teach the concept of a context at all. Moreover, none of the citations provided by Dr. Greenberg illustrate that a context component captures context information associated with user-defined content. In fact, it discloses the opposite, namely that a

user is required to define both core and custom filing structures for the documents. For example, the '575 Patent states “[i]n accordance with the invention, there is provided a method and apparatus thereof, for sharing customization to a filing system in which documents stored in memory (e.g., a shared repository) are categorize and accessed by multiple users through an application program interface. To begin, the application program interface receives input for defining a core filing structure...” ‘575 Patent, Col. 2, ll. 25-32 (emphasis added). Moreover, the ‘575 Patent provides [i]n operation, a user at the application program interface 110 defines the core filing structure 118 to provide a generic framework (i.e., category schema) for categorizing the document 115 in the document store 114...Once defined, the core filing structure 118 can be viewed and/or edited at the application program interface 110 through category manager 112 to define customized filing structures 120. ‘575 Patent, Col. 4, ll. 11-15 (emphasis added). In summary, the ‘575 Patent states “[u]sers customize the filing structure to express how they want the shared collection of documents to be categorized.” ‘575 Patent, Col. 9, ll. 39-41 (emphasis added).

157. In addition, the ‘575 Patent does not teach a tracking component as recited in Claim 1 of the ‘761 Patent. Dr. Greenberg does not provide any citation which meets this element. In fact, the citations that Dr. Greenberg provides teach that each user is given his own view of the categorization of documents and not multiple views. For example, the ‘575 Patent states “the particular level of customization is limited to a hierarchy of customization defined for a particular user.” ‘575 Patent, Col. 5, ll. 43-46. Moreover, nothing in the ‘575 Patent teaches tracking a change of a user from a first context to a second context. This disclosure is simply absent as the concept of a context is not taught, much less the tracking of a user from one context to another. For at least these reasons, the ‘575 Patent does not invalidate the ‘761 Patent.

158. Furthermore, nothing in the '575 Patent teaches that the metadata is dynamically updated when the user access data from a second context. Dr. Greenberg's citations describe the instance in which a user defines the core filing structure (which happens to be the same analysis with regard to the context component thereby rendering his analysis nonsensical) that has nothing to do with the tracking of a user when a user access a data from a second context. Even worse, Dr. Greenberg states that the '575 Patent provides an example of how second contexts are dynamically updated, however this is not a claim limitation. Moreover, this statement is wrong because the filing structures are modified according to the user's input, not dynamically updated. Finally, Dr. Greenberg states that the structure translator is used as a tracking component that dynamically updates the stored metadata as a user access the data from a second context. This is also wrong because the translator merely translates the view of the core filing structures according to the particular user's customized filing structure and does not change as the same user access the data from a first context. '575 Patent, Col. 6, ll. 7-29 For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

#### **Claim 4**

159. As discussed above, Claim 1 of the '761 Patent is valid in light of the '575 Patent. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the '575 Patent. For at least this reason, the '575 Patent does not invalidate the '761 Patent.

160. Furthermore, I disagree with Dr. Greenberg's opinion that the '575 Patent discloses the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. As discussed above, the '575 Patent teaches a DMS for where a user is required to define the core filing structure for the documents. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

**Claim 7**

161. As discussed above, Claim 1 of the '761 Patent is valid in light of the '575 Patent. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the '575 Patent. For at least this reason, the '575 Patent does not invalidate the '761 Patent.

162. Furthermore, I disagree with Dr. Greenberg's opinion that the '575 Patent discloses that data created in the first context is associated with data created in the second context. Dr. Greenberg's analysis is based on the faulty premise that a view of a core or customized file structure is a context (environment). However, these are simply customized views of files in a typical hierarchical folder structure. Moreover, the '575 Patent does not disclose creating the data file in either a first or a second view of the filing structure. The '575 Patent simply teaches a way of viewing data, and does not disclose creating data. Furthermore, the '575 Patent does not disclose associating data in the file system with other data in the file system. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

163. For Claim 7, Dr. Greenberg again attempts to include by reference the analysis he provided for Claim 1. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 7 because Claim 1 and Claim 7 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 7, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 9**

164. I disagree with Dr. Greenberg's opinion that the '575 Patent invalidates Claim 9 of the '761 Patent. Specifically, I disagree that the '575 Patent discloses the computer-

executable act of creating data within a user environment of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. None of Dr. Greenberg's citations teach that data is created within a user environment of a web-based computer platform via user interaction with the user environment by an application. Instead, the citations teach that the system only serves to file the data brought into the document store of the system and filed using a user editable core filing structure. In part, the '575 Patent provides that "[i]n operation, a user at the application program interface 110 defines the core filing structure 118 to provide a generic framework (i.e., category schema) for categorizing the document 115 in the document store 114.... Once defined, the core filing structure 118 can be viewed and/or edited at the application program interface 110 through category manager 112 to define customized filing structures 120. '575 Patent, Col. 4, ll. 11-15 (emphasis added). In summary, the '575 Patent states "[u]sers customize the filing structure to express how they want the shared collection of documents to be categorized." '575 Patent, Col. 9, ll. 39-41. Dr. Greenberg's analysis is based on the faulty premise that a view of a core or customized file structure is equivalent to a user environment. However, these file views are simply customized views of files in a typical hierarchical folder structure. Moreover, the '575 Patent does not disclose creating the data file in either a first or a second view of the filing structure. The '575 Patent simply teaches a way of viewing data, and does not disclose creating data. Furthermore, the '575 Patent does not disclose associating data in the file system with other data in the file system. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

165. I disagree with Dr. Greenberg's opinion that the '575 Patent discloses dynamically associating metadata with the data, the data and metadata stored on a storage

component of the web-based computing platform, the metadata includes information related to the user, the data, the application, and the user environment. As discussed above, the '575 Patent does not disclose creating metadata for files in the system. Furthermore, Dr. Greenberg has referenced a section which refers to assigning unique document filing location identifiers to the data. However, there is no support that this is done dynamically, nor that this information corresponds to the user, the data, the application, and the user environment. Dr. Greenberg has referenced a section which states that the documents in a specific folder can be ordered based on their name, creation date, or file size, seemingly to imply that this information is used to create unique identifiers. However, this section does not relate to the creation of identifiers, rather it corresponds to a sort function within a folder for ordering the view of the documents. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

166. For most of Claim 9, Dr. Greenberg attempts to include by reference the analysis he provided for Claims 1 and 4. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 9 because Claims 1 and 4 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 11**

167. As discussed above, Claim 9 of the '761 Patent is valid in light of the '575 Patent. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the '575 Patent. For at least this reason, the '575 Patent does not invalidate the '761 Patent.



168. Furthermore, I disagree with Dr. Greenberg's opinion that the '575 Patent discloses indexing content of the user environment such that a plurality of users can access the content from an associated plurality of user environments. Dr. Greenberg states that the data files are indexed because they are placed into a folder hierarchy. However, this incorrect as indexing data requires more than organizing documents into folders. Furthermore, and as discussed above, Dr. Greenberg's analysis for Claim 11 is based on the faulty premise that a view of a core or customized file structure is a user environment. These are simply customized views of files in a typical hierarchical folder structure. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

169. For Claim 11, Dr. Greenberg again attempts to include by reference the analysis he provided for Claim 1. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 11 because Claim 1 is directed to different systems and contain different limitations than Claim 11. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 11, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

#### **Claim 16**

170. Dr. Greenberg has failed to provide any citations indicating how the limitation of Claim 16 is met by the '575 Patent. However, in his analysis he indicates that accessing the user environment via a portable wireless device is obvious. As such, I refer back to my previous discussion refuting the obviousness of Claim 16.

#### **Claim 21**

171. I disagree with the claim chart that the '575 Patent invalidates Claim 21 of the '761 Patent. First, the claim chart continues to use an incomplete analysis to support his assertions. For example, he fails to provide citations to the '575 Patent that disclose all elements of Claim 21. Furthermore, I disagree that the '575 Patent discloses the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. First, as citations to the '575 Patent are not provided for all elements of Claim 21, it is improper to assert that the '575 Patent discloses this claim.

172. In addition, the claim chart attempts to include by reference the analysis he provided from Claim 9a into his analysis of Claim 21. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contain different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

173. With regard to the second element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9b or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contains different limitations. For example, the claim chart fails to define

what he asserts to be a “user workspace.” The term “user workspace” is not used in Claim 9. As a result, the claim chart’s method of merely incorporating by reference results in inconsistencies as he seems to define “application” and “user workspace” as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

174. Again, with regard to the third element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9c or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be a “user workspace.” The term “user workspace” is not used in Claim 9. As a result, the claim chart’s method of merely incorporating by reference results in inconsistencies as he seems to define “application” and “user workspace” as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

175. Again, with regard to the fourth element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9d or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be a “user workspace.” The term “user workspace” is not used

181. For Claim 25, Dr. Greenberg again attempts to include by reference the analysis he provided for Claim 1. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 25 because Claim 1 is directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 25, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 31**

182. As discussed above, Claim 23 of the '761 Patent is valid in light of the '575 Patent. Because Claim 31 is dependent on Claim 23, Claim 31 is also valid in light of the '575 Patent. For at least this reason, the '575 Patent does not invalidate the '761 Patent.

183. Furthermore, I disagree with Dr. Greenberg's opinion that the '575 Patent discloses that the storage component stores the data and the metadata according to at least on of a relational and an object storage methodology. Dr. Greenberg has only referenced a section related to a prior art system which is explicitly disclosed to be different then the system in the '575 Patent. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

**Claim 32**

184. As discussed above, Claim 23 of the '761 Patent is valid in light of the '575 Patent. Because Claim 32 is dependent on Claim 23, Claim 32 is also valid in light of the '575 Patent. For at least this reason, the '575 Patent does not invalidate the '761 Patent.

185. Furthermore, I disagree with Dr. Greenberg's opinion that the '575 Patent discloses storing of the metadata in the storage component in association with data facilitates many-to-many functionality of the data via the metadata. The '575 Patent does not disclose that

metadata is used to facilitate the functionality of two or more users using two or more data files.

For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

**Hess**

186. I disagree that the Hess paper anticipates the '761 Patent. First, I disagree that the Hess paper invalidates the '761 Patent because the Hess paper is not prior art to the '761 Patent. Specifically, the Hess paper did not publish until July 22, 2002. As discussed above, the earliest effective filing date of the '761 Patent is December 11, 2002. Because the Hess paper did not publish before December 11, 2001, the Hess paper is not prior art to the '761 Patent. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

187. In addition, it is my opinion that the '761 Patent is valid in light of the Hess paper because Dr. Greenberg fails to provide sufficient proof required to invalidate a patent. Specifically, Dr. Greenberg's descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, his citations do not support his conclusions. As a consequence, Dr. Greenberg's disclosure has not provided sufficient evidence. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to render the '761 invalid.

188. Dr. Greenberg's opinion that the Hess paper discloses the system described in the '761 Patent is wrong for several reasons. Generally, the Hess paper discloses a system which uses RF badges, cameras, electronic rings, or other means to detect the physical location of someone. Hess at 5. This is completely different from the teachings of the '761 Patent which discloses a computer implemented system so that users can collaborate in an effective and efficient manner. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the Hess paper is completely different than, and thus does not invalidate, the '761 Patent.

189. In addition, I disagree that the Hess paper invalidates the '761 Patent because the Hess paper does not disclose each and every element of the asserted claims. With regard to Claim 1, the Hess paper does not disclose a context component nor a tracking component as provided in the '761 Patent.

190. Specifically, the Hess paper does not disclose a context component as recited in Claim 1 of the '761 Patent. None of the citations provided by Dr. Greenberg teach that the Hess paper involves a computer implemented context component which captures context information associated with user-defined data. Instead, the Hess paper discloses logical devices called "mount points" which carry information about where a person's files are located. The mount points are used by the system as people move into different rooms called "active spaces." Moreover, the "mount points" do not capture context information associated with user-defined data. Instead, these "mount points" simply contain information about where the person's files are located. These files are then made available to the person in the "active space." For example, the Hess paper provides "context is used to 1) automatically make personal storage available to applications, conditioned on user presence..." and "the physical location of the user triggers the automatic configuration of the user's environment." Hess at 4. In addition, there is no disclosure regarding the dynamic storage of context information in metadata. Instead, the Hess paper suggests that user must attached context information manually. For example, "[t]he file system allows a specific context to be attached to data by simply copying it to a context directory. Presenting context through the file system interface allows standard file system primitives (i.e., rename, remove, copy, mkdir) to be used to attach and detach context to files." Hess at 7. Furthermore, Hess provides that "context is set manually" and the "manual

configuration is not a burden.” Hess at 10. For at least these reasons, the Hess paper does not invalidate the ‘761 Patent.

191. Moreover, the Hess paper does not disclose a tracking component as recited in Claim 1 of the ‘761 Patent. First, Dr. Greenberg uses a number of the same quotations and analysis for both the context and tracking component which renders his analysis nonsensical. Furthermore, none of the citations provided by Dr. Greenberg teach that a computer implemented tracking component. Instead, the Hess paper teaches “mount points” that are carried by people to detect their physical location. Hess at 4. Moreover, the location of the people is not stored. Instead, it is used to make data available in the particular space that the person is located. Hess at 5. Furthermore, as discussed above, no data is stored dynamically. Instead, the location of the person wearing the device is given access to files which are put in the appropriate directory. Hess at 7. In addition, the Hess paper does not describe dynamically updating the metadata when a user accesses data from a second context. In fact, there is no description of a user accessing data from a second context, and no description of updating metadata when a user access data from a second context. For at least these reasons, the Hess paper does not invalidate the ‘761 Patent.

#### **Claim 4**

192. As discussed above, Claim 1 of the ‘761 Patent is valid in light of the Hess paper. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the ‘761 Patent.

193. Furthermore, I disagree with Dr. Greenberg’s opinion that the Hess paper discloses the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. Greenberg’s citations to

the Hess paper describe, at most, a description of between a user's physical location (i.e. the office in which they are physically located) and a path to a subset of that user's files. Hess at 4-5, 7, 9. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

**Claim 7**

194. As discussed above, Claim 1 of the '761 Patent is valid in light of the Hess paper. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

195. Furthermore, I disagree with Dr. Greenberg's opinion that the Hess paper discloses associating data created in the first context with data created in the second context. The Hess paper describes a user physically moving from one location to another, such as a user going from their own office to a colleague's office, and that user's electronic files being made available in both physical locations. Hess at 3-5 This is not the same as the system disclosed in Claim 7 of the '761 Patent, in which the system automatically associates data created in a first computing context with data created in a second computing context. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

**Claim 9**

196. I disagree with Dr. Greenberg's opinion that the Hess paper discloses each and every element of Claim 9 of the '761 Patent. As I mentioned above, the Hess paper discloses logical devices called "mount points" which carry information about where a person's files are located. The mount points are used by the system as people move from one physical location to another physical location. The subject matter of Claim 9 to the '761 Patent, a computerized



method for automatically managing data is fundamentally different than the technology described in the Hess paper.

197. In addition, for many elements of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

198. With regard to the first element of Claim 9, the Hess paper does not describe the computer-executable act of creating data within a user environment, as disclosed in the first element of Claim 9. While Dr. Greenberg does cite to portions of the Hess paper that discuss creating and storing a file, neither of these citations describe creating data in a user environment. Hess at 9, 12. The Hess paper similarly does not describe a web-based computing platform. Dr. Greenberg all but concedes this point by stating that Hess's system "could be" web-based because it used XML and a graphical user interface. *See* Greenberg Expert Report, Ex. C-4 at 10. The presence of a graphical user interface and XML do not, themselves, describe a web-based computing system. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

199. With regard to the second element of Claim 9, the Hess paper does not disclose dynamically associating metadata with the data, where the metadata includes information related to the user, the data, the application, and the user environment. Dr. Greenberg admits that there

is no explicit reference in the Hess paper disclosing an association of the metadata to the data, stating that the “mount tags” perform this function through “an implicit mechanism.” *See* Greenberg Expert Report, Ex. C-4 at 10. As I have stated above, the “mount tags” merely refer to the file path in which a user’s files are stored and do not perform the task of associating data with metadata. In addition, Dr. Greenberg’s analysis does not show that Hess discloses metadata including information related to the data. *See id.*

200. With regard to the third and fourth elements of Claim 9, Dr. Greenberg does not offer any analysis of these claim elements at all and merely refers to his analysis for several elements of Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of these elements of Claim 9 and, to the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg’s opinion in my analysis above.

**Claim 11**

201. As discussed above, Claim 9 of the ‘761 Patent is valid in light of the Hess paper. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the ‘761 Patent.

202. Furthermore, I disagree with Dr. Greenberg’s opinion that the Hess paper discloses indexing the content of the user environment so that multiple users can access the content from multiple user environments. The Hess paper describes a system of “virtual directories” that allow multiple file paths to refer to the same underlying files. *See* Hess at 6. This system does not involve “indexing” the data in any meaningful way. In addition, as discussed above, Hess describes accessing data as a user moves from one physical location to

another, which is different from the method described in Claim 11, in which multiple users are can access data from different user environments in a computer system. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

**Claim 16**

203. As discussed above, Claim 9 of the '761 Patent is valid in light of the Hess paper. Because Claim 16 is dependent on Claim 9, Claim 16 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

204. Furthermore, I disagree with Dr. Greenberg's opinion that the Hess paper discloses accessing the user environment from via a portable wireless device. Dr. Greenberg states that "Hess discloses accessing the user environment (for example the space) via a portable wireless device." Greenberg Expert Report, Ex. C-4 at 12. This argument is nonsensical because a "space" is a physical location, such as an office, and it is not possible for a person to access a physical location from a portable wireless device. Dr. Greenberg states no additional arguments regarding Claim 16, but again attempts to incorporate his obviousness argument reference into his anticipation argument for this claim. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of these elements of Claim 16 and, to the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 16, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 21**

205. I disagree with Dr. Greenberg's opinion that the Hess paper discloses each and every element of Claim 21 of the '761 Patent. Dr. Greenberg provides absolutely no original analysis for this claim, and does not cite to any specific portions of the Hess paper as allegedly

disclosing each and every claim element of Claim 21. In fact, all that Dr. Greenberg does for his analysis of Claim 21 is incorporate by reference other portions of his report addressing claims 9 and 11. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claims 9 and 11 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 23**

206. I disagree with Dr. Greenberg's opinion that the Hess paper discloses each and every element of Claim 23 of the '761 Patent. Again, similar to his analysis of Claim 21, Dr. Greenberg provides analysis for only a narrow portion of one element of Claim 23, and relies on other portions of his report addressing Claims 1 and 9 for all other elements of the claim. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 23 because Claims 1 and 9 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

207. I further disagree with Dr. Greenberg's analysis of the one portion of Claim 23 that he does address in his report. The Hess paper does not disclose assigning applications to a first user workspace. *See* Hess at 3 (“[u]sers can move between spaces and their environment... can move with them.”). Hess describes mobile users who are able to use their applications and

data as they move from one physical location to another, but this is distinct from the step of assigning applications to a user's computer-based user workspace. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

**Claim 25**

208. As discussed above, Claim 23 of the '761 Patent is valid in light of the Hess paper. Because Claim 25 is dependent on Claim 23, Claim 25 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

209. Furthermore, I disagree with Dr. Greenberg's opinion that the Hess paper a context component that captures data associated with a relationship between two different user workspaces. As I have stated several time above, the Hess paper does not disclose a context component. In addition, Dr. Greenberg's analysis for this claim discusses the mount server and virtual directory, which in my opinion do not capture data associated with the relationship between two user workspaces. For at least these reasons, the '538 Patent and the '179 Patent do not invalidate the '761 Patent.

**Claim 31**

210. As discussed above, Claim 23 of the '761 Patent is valid in light of the Hess paper. Moreover, Dr. Greenberg has failed to provide sufficient proof that the '761 Patent is invalid. Because Claim 31 is dependent on Claim 23, Claim 31 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

**Claim 32**

211. As discussed above, Claim 23 of the '761 Patent is valid in light of the Hess paper. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the '761

Patent is invalid. Because Claim 32 is dependent on Claim 23, Claim 32 is also valid in light of the Hess paper. For at least these reasons, the Hess paper does not invalidate the '761 Patent.

### **The '306 Patent**

212. I disagree that the '306 Patent<sup>4</sup> anticipates the '761 Patent. First, it is my opinion that the '761 Patent is valid in light of the '306 Patent because Dr. Greenberg fails to provide sufficient proof required to invalidate a patent. Specifically, Dr. Greenberg's descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, his citations do not support his conclusions. As a consequence, Dr. Greenberg's disclosure has not provided sufficient evidence. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to render the '761 invalid.

213. Moreover, I disagree that the '306 Patent invalidates the '761 Patent because the '306 Patent does not disclose each and every element of the asserted claims. With regard to Claim 1, the '306 Patent does not disclose a context component nor a tracking component as provided in the '761 Patent.

214. Dr. Greenberg's opinion that the '306 Patent discloses all of the elements of the asserted claims of the '761 Patent is incorrect for several reasons. Generally, the '306 Patent discloses a meta-document which retains processing information. It is essentially a history system that keeps a history for several related documents. Moreover, the meta-document is sent from one source to another, and does not incorporate the idea of multiple contexts. The '761 Patent on the other hand captures environmental and tracking information and stores the

---

<sup>4</sup> Dr. Greenberg includes the '934 Patent when referring to the '306 Patent. For consistency, I have done the same. However, the '934 Patent is not valid prior art because it was filed on September 24, 1999 and did not publish until September 30, 2004. As discussed herein, the inventors of the '761 Patent conceived of the invention which resulted in the issuance of the '761 Patent no later than August 19, 1999. Furthermore, as discussed above, the earliest effective filing date of the '761 Patent is December 11, 2002. Because the '934 Patent was not filed before August 19, 1999 and did not publish before December 11, 2001, the '934 Patent is not prior art to the '761 Patent. For at least these reasons, and for the same reasons discussed with regard to the '306 Patent, the '934 Patent does not invalidate the '761 Patent.

information on a storage component so that data can be shared among users in multiple contexts. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the premise of the '306 Patent is significantly different than, and thus does not invalidate, the '761 Patent.

215. Specifically, the '306 Patent does not disclose a context component as recited in Claim 1. None of the citations provided by Dr. Greenberg illustrate that a context component captures context, or environmental, information associated with user-defined content. Specifically, Dr. Greenberg states the context is the "source or environment 30." However, nothing about the "source or environment 30" is captured by the meta-document disclosed in the '306 Patent. Even the citation that Dr. Greenberg relies upon specifically states that "[p]rocessing information 21 is created (in this embodiment by source 30) and stored on meta-document 20" and does not disclose the environmental information is stored on meta-document.

216. Moreover, the '306 Patent does not disclose a context component as recited in Claim 1 because metadata representing the context is not dynamically stored on a storage component. Instead, all of the processing information associated with a document is stored as a document history. This distinction is provided throughout the disclosure of the '306 Patent. For example, the '306 Patent states that "[t]he processing information (14) is recorded on the meta-document (10) each time the meta-document (10) is processed in some manner." '306 Patent, Abstract. In fact, the concept of context is completely absent from the '306 Patent as the metadata discussed in the '306 Patent only concerns a document's history, not the environmental information associated with user-defined data created by user-interaction. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

217. Moreover, the '306 Patent does not teach a tracking component as recited in Claim 1 of the '761 Patent. Dr. Greenberg does not cite any passage of the '306 Patent that

discloses the tracking of a user from a first context to a second context. Instead, Dr. Greenberg repeats the same analysis with regard to the context component (which render his analysis nonsensical). In fact, the '306 Patent teaches away from tracking a user from one context to another. The '306 Patent provides that “[a]ll of the processing information in the meta-document is explicit, accessible and reusable so that other tools or people in different contexts can benefit from it.” '306 Patent at 3, ¶14. Even Dr. Greenberg’s own analysis states the '306 Patent teaches “transmission of document from the first source 30 to a second source 32)” and not the tracking of a user from one context to another. In addition, the meta-document is not accessible from multiple contexts. This is because the concept of a context (in the sense of an environment) is completely absent. Thus, there is nothing in the '306 Patent that discloses accessing data from multiple contexts because contexts are not disclosed at all. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

#### **Claim 4**

218. As discussed above, Claim 1 of the '761 Patent is valid in light of the '306 Patent. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

219. Furthermore, I disagree with Dr. Greenberg’s opinion that the '306 Patent discloses the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. Instead, the concept of a user environment is completely absent from the '306 Patent, as the '306 Patent only concerns a document’s history. Thus the relationship between the user and user environmental information is never captured. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.



**Claim 7**

220. As discussed above, Claim 1 of the '761 Patent is valid in light of the '306 Patent. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

221. Furthermore, I disagree with Dr. Greenberg's opinion that the '306 Patent discloses wherein the data created in the first context is associated with data created in the second context. As discussed above, the concept of a context is completely absent from the '306 Patent, as the '306 Patent only concerns a document's history. Thus the '306 Patent cannot teach associating the data created in first context with a second context. Of note, despite the fact that Claim 7 is dependent of Claim 1, Dr. Greenberg's analysis relies on completely different definitions for second context. Namely, in Claim 1 second context is defined as "email," now for Claim 7 the same term is defined as "in the second environment's knowledge department." *See* Greenberg Expert Report, Ex. C-5 at 13. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

**Claim 9**

222. I disagree with Dr. Greenberg's opinion that the '306 Patent invalidates Claim 9 of the '761 Patent. Specifically, I disagree that the '306 Patent discloses the computer-executable act of creating data within a user environment of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. Of note, Dr. Greenberg is unable to define what in the '306 Patent corresponds to the web-based computer platform of Claim 9 as the '306 Patent merely teaches a meta-document which retains processing information.

223. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 1a into his analysis of Claim 9. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. Of note, Dr. Greenberg's analysis relies on defining user environment with inconsistent meanings within the same claim. For the first element, Dr. Greenberg's example of a user environment is a meta-document associated with the source or environment, while Dr. Greenberg's analysis of the second element of Claim 9 changes the term to mean domain. Greenberg Expert Report, Ex. C-5 at 14-15. Moreover, the concept of a user environment is completely absent from the '306 Patent, as the '306 Patent only concerns a document's history. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

224. With regard to the second element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. As discussed above, information representing the context is not dynamically stored on a storage component. Instead, all of the processing information associated with a document is stored as a document history. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

225. Again, with regard to the third element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. As discussed above, the '306 Patent teaches "transmission of document from the first source 30 to a second source 32" and not the tracking of a user from one user environment to another. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

226. Again, with regard to the fourth element of Claim 9, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 1 and Claim 4, or duplicates the same analysis and citations from Claim 1 and Claim 4. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 (and Claim 4) and Claim 9 are directed to different systems and contain different limitations. As discussed above, the concept of a user environment is completely absent from the '306 Patent. Thus, there is nothing in the '306 Patent that discloses employing data from multiple user environments because user environments are not disclosed at all. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 11**

227. As discussed above, Claim 9 of the '761 Patent is valid in light of the '306 Patent. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

228. Furthermore, I disagree with Dr. Greenberg's opinion that the '306 Patent discloses indexing context of the user environment such that a plurality of users can access the content from an associated plurality of user environments. As discussed above, the concept of a user environment is completely absent from the '306 Patent. Thus, there is nothing in the '306 Patent that discloses indexing content such that a multiple users can access multiple user environments. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

**Claim 16**

229. As discussed above, Claim 9 of the '761 Patent is valid in light of the '306 Patent. Because Claim 16 is dependent on Claim 9, Claim 16 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

230. In contrast to Dr. Greenberg's assertion in his Expert Report, the claim chart does not even attempt to claim that '306 Patent discloses accessing the user environment via a portable wireless device. Instead, the claim chart only makes an unsupported obviousness argument which is addressed below. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

**Claim 21**

231. I disagree with Dr. Greenberg's opinion that the '306 Patent invalidates Claim 21 of the '761 Patent. I disagree that the '306 Patent discloses the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based

computing platform using an application. Generally, the '306 Patent discloses a meta-document which retains processing information. It is essentially a history system that keeps a history for several related documents. Moreover, the meta-document is sent from one source to another, and does not incorporate the idea of multiple user workspaces. The '761 Patent on the other hand captures environmental and tracking information and stores the information on a storage component so that data can be shared among users in multiple user workspaces. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the premise of the '306 Patent is significantly different than, and thus does not invalidate, the '761 Patent.

232. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 9 into his analysis of Claim 21. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 21 because Claim 9 and Claim 21 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

233. With regard to the second element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 and Claim 21 are directed to different systems and contain different limitations. As discussed above, information representing the context is not dynamically stored on the web-based computing platform. Instead, all of the processing information associated with a document is stored as a document history. To the extent Dr. Greenberg has failed to address all of the additional limitations of

Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

234. Again, with regard to the third element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 and Claim 21 are directed to different systems and contain different limitations. As discussed above, '306 Patent teaches "transmission of document from the first source 30 to a second source 32" and not the tracking of a user from one user workspace to another. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

235. Again, with regard to the fourth element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to different systems and contain different limitations. Instead the concept of a user workspace is completely absent from the '306 Patent. Thus, there is nothing in the '306 Patent that discloses employing data from multiple user workspaces because user workspaces are not disclosed at all. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

236. Again, with regard to the fifth element of Claim 21, Dr. Greenberg simply attempts to include by reference the analysis he provided from Claim 11 or duplicates the same analysis and citations from Claim 11. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 11 is directed to different systems and contain different limitations. As discussed above, the concept of a user workspace is completely absent from the '306 Patent. Thus, there is nothing in the '306 Patent that discloses indexing content such that a multiple users can access multiple user workspaces. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

#### **Claim 23**

237. I disagree with Dr. Greenberg's opinion that the '306 Patent invalidates Claim 23 of the '761 Patent. Furthermore, I disagree that the '306 Patent discloses the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. Generally, the '306 Patent discloses a meta-document which retains processing information. It is essentially a history system that keeps a history for several related documents. Moreover, the meta-document is sent from one source to another, and does not incorporate the idea of multiple user workspaces. The '761 Patent on the other hand captures environmental and tracking information and stores the information on a storage component so that data can be shared among users in multiple user workspaces. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the premise of the '306 Patent is significantly different than, and thus does not invalidate, the '761 Patent. Information representing the context is not dynamically stored on a storage component of the

web-based server. Instead, all of the processing information associated with a document is stored as a document history.

238. In addition, Dr. Greenberg attempts to include by reference the analysis he provided from Claim 9 and Claim 1 into his analysis of Claim 23. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 23 because Claims 1 and 9 are directed to different systems and contain different limitations. Furthermore, Dr. Greenberg continues to use an incomplete analysis to support his assertions, as he merely cites to his analysis of Claim 9, another deficient analysis. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

239. With regard to the second element of Claim 23, none of Dr. Greenberg's citations teach that the system assigns one or more applications to the first user workspace. As discussed above, '306 Patent teaches "transmission of document from the first source 30 to a second source 32" and not the tracking of a user from one user workspace to another. As discussed above, because the concept of a user workspace is completely absent. Thus, there is nothing in the '306 Patent that discloses accessing data from multiple user workspaces because user workspaces are not disclosed at all. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.



**Claim 25**

240. As discussed above, Claim 25 of the '761 Patent is valid in light of the '306 Patent. Because Claim 25 is dependent on Claim 23, Claim 23 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

241. Furthermore, I disagree with Dr. Greenberg's opinion that the '306 Patent discloses that the context component captures relationship data associated with a relationship between a first user workspace and at least one other user workspace. Instead, the concept of a user workspace is completely absent from the '306 Patent, as the '306 Patent only concerns a document's history. Thus the relationship between the user and user environmental information is never captured. As discussed above, Dr. Greenberg's use of "source/environments" is inapposite to this claim. Furthermore, Dr. Greenberg's use of a "document cycle process" is inapposite to this claim as each usage of a document is not a user workspace. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

**Claim 31**

242. As discussed above, Claim 31 of the '761 Patent is valid in light of the '306 Patent. Because Claim 31 is dependent on Claim 23, Claim 23 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent. Furthermore, Dr. Greenberg's citations of XML and RDF in the '306 Patent do not demonstrate that the storage component stores the data and the metadata according to at least one of a relational and an object storage methodology. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

**Claim 32**

243. As discussed above, Claim 32 of the '761 Patent is valid in light of the '306 Patent. Because Claim 32 is dependent on Claim 23, Claim 23 is also valid in light of the '306 Patent. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

244. Furthermore, I disagree with Dr. Greenberg's opinion that the '306 Patent discloses storing the metadata in the storage component in association with data facilitates many-to-many functionality of the data via metadata. As discussed above, metadata representing the context is not dynamically stored on a storage component. Instead, all of the processing information associated with a document is stored as a document history. Thus the '306 Patent does not disclose storing the metadata in the storage component in association with data facilitates many-to-many functionality of the data via metadata. For at least these reasons, the '306 Patent does not invalidate the '761 Patent.

**The '994 Patent**

245. I disagree that the '994 Patent anticipates the '761 Patent. First, it is my opinion that the '761 Patent is valid in light of the '994 Patent because Dr. Greenberg fails to provide sufficient proof required to invalidate a patent. Specifically, Dr. Greenberg's descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, his citations do not support his conclusions. As a consequence, Dr. Greenberg's disclosure has not provided sufficient evidence. Therefore, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to render the '761 invalid.

246. Moreover, I disagree that the '994 Patent invalidates the '761 Patent because the '994 Patent does not disclose each and every element of the asserted claims. With regard to

Claim 1, the '994 Patent does not disclose a context component nor a tracking component as provided in the '761 Patent.

247. Dr. Greenberg's opinion that the '994 Patent discloses all of the elements of the asserted claims of the '761 Patent is wrong for several reasons. Generally, the '994 Patent discloses a middleware system. '994 Patent, Col. 1, ll. 9-15; Col. 4, ll. 12-18. Middleware is generally known as software that connects other software together. It commonly provides functionality which allows completely different software system to operate together. The '761 Patent on the other hand is a system which captures environmental and tracking information and stores the information on a storage component so that data can be shared among users in multiple contexts. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the premise of the '994 Patent is significantly different than, and thus does not invalidate, the '761 Patent.

248. Specifically, the '994 Patent does not disclose a context component as recited in Claim 1. None of the citations provided by Dr. Greenberg describe a context component that captures context information associated with user-defined data. This is because the '994 Patent teaches middleware, and the middleware merely gathers the information that is already provided by other systems in order to create an audit trail. '994 Patent, Col. 1, ll. 9-15; Col. 4, ll. 12-18. As such, there is no disclosure of a system which contains a context component as recited in Claim 1. In fact, the concept of a context (as environment) is completely absent. Moreover, the system does not keep track of contexts, or users moving among contexts. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

249. In addition, the '994 Patent does not teach a tracking component as recited in Claim 1. It appears that Dr. Greenberg also believes that a tracking component is not explicitly

disclosed as he states that the '994 Patent "necessarily involves tracking a change from one context to another." I disagree with Dr. Greenberg's statement as tracking a change from one context to another is not implicitly taught. In addition, it is irrelevant because the claim requires tracking a user from one context to another. There is nothing in the '994 Patent which teaches the tracking of a user from one context to another. In fact, tracking a user from one context to another has no utility for the system disclosed in the '994 Patent because it is middleware which keeps track of the information associated with documents, not users. Furthermore, there is also nothing which teaches updating the metadata based on the change when a user access data from a second context. Dr. Greenberg's citations do not provide any support, and actually teach away from this limitation because the situations involve sending a document from one system to another, and not where a user accesses data from a second context. '994 Patent, Col. 19, ll. 38-63; Col. 20, ll. 14-28. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

**Claim 4**

250. As discussed above, Claim 1 of the '761 Patent is valid in light of the '994 Patent. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the '994 Patent. For at least this reason, the '994 Patent does not invalidate the '761 Patent.

251. Furthermore, I disagree with Dr. Greenberg's opinion that the '994 Patent discloses the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. As discussed above, the '994 Patent teaches a middleware system which imports data from other systems, and does not disclose capturing context information. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

**Claim 7**

252. As discussed above, Claim 1 of the '761 Patent is valid in light of the '994 Patent. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the '994 Patent. For at least this reason, the '994 Patent does not invalidate the '761 Patent.

253. Furthermore, I disagree with Dr. Greenberg's opinion that the '994 Patent discloses that data created in the first context is associated with data created in the second context as the concept of contexts is completely absent for the '994 Patent. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

254. For Claim 7, Dr. Greenberg again attempts to include by reference the analysis he provided for Claim 1. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 7 because Claim 1 and Claim 7 are directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 7, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 9**

255. I disagree with Dr. Greenberg's opinion that the '994 Patent invalidates Claim 9 of the '761 Patent. Specifically, I disagree that the '994 Patent discloses the computer-executable act of creating data within a user environment of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. The '994 Patent teaches a middleware system that combines data from different sources for review, and the middleware system merely gathers the information that is already provided by other systems (e.g., Documentum EDMS and SAS/PH-Clinical

Software). '994 Patent, Col. 1, ll. 9-15; Col. 4, ll. 12-18. Other applications may feed documents into the system, but the middleware system is not disclosed to be used to create documents. As such, there is no disclosure of a system which contains a context component as recited in Claim 1. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

256. I disagree that the '994 Patent discloses the computer-executable act of dynamically associating metadata with the data, the data and metadata stored on a storage component of the web-based computing platform, the metadata includes information related to the user, the data, the application, and the user environment. The '994 Patent does not disclose dynamically associating metadata with the data. The '994 Patent teaches a middleware system that combines data from different sources for review, and the middleware merely gathers the information that is already provided by other systems (e.g., Documentum EDMS and SAS/PH-Clinical Software). '994 Patent, Col. 1, ll. 9-15; Col. 4, ll. 12-18. The '994 Patent does not teach dynamically associating metadata with this data as it is created. Rather, the '994 Patent teaches a system where any metadata is already included with the documents. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

257. Again, Dr. Greenberg attempts to include by reference the analysis he provided from Claims 1 and 4 into his analysis of the various elements of Claim 9. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 9 because Claim 1 and 4 are directed to different systems and contain different limitations the Claim 9. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 11**

258. As discussed above, Claim 9 of the '761 Patent is valid in light of the '994 Patent. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the '994 Patent. For at least this reason, the '994 Patent does not invalidate the '761 Patent.

259. Furthermore, I disagree with Dr. Greenberg's opinion that the '994 Patent discloses indexing content of the user environment such that a plurality of users can access the content from an associated plurality of user environments. For this claim, Dr. Greenberg has only cited to sections of the '994 Patent which disclose links from a document viewed in the Documentum EDMS document to a data in the SAS/PH-Clinical Software application. Simply creating a link to outside data is not equivalent to indexing data. Furthermore, the '994 Patent does not disclose indexing data so a plurality of user can access the data from a plurality of workspaces. Rather, the '994 Patent teaches that links to the data can only be accessed from one purported workspace, the Documentum EDMS interface. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

**Claim 16**

260. Dr. Greenberg has failed to provide any citations indicating how the limitation of Claim 16 is met by the '994 Patent. However, in his analysis he indicates that accessing the user environment via a portable wireless device is obvious. As such, I refer below to my discussion refuting the obviousness of Claim 16.

**Claim 21**

261. I disagree with the claim chart that the '994 Patent invalidates Claim 21 of the '761 Patent. First, the claim chart continues to use an incomplete analysis to support his assertions. For example, he fails to provide citations to the '994 Patent that disclose all elements

of Claim 21. Furthermore, I disagree that the '994 Patent discloses the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. First, as citations to the '994 Patent is not provided for all elements of Claim 21, it is improper to assert that the '994 Patent discloses this claim.

262. In addition, the claim chart attempts to include by reference the analysis he provided from Claim 9a into his analysis of Claim 21. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contain different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

263. With regard to the second element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9b or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the



claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

264. Again, with regard to the third element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9c or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

265. Again, with regard to the fourth element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9d or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is

my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid.

Otherwise, I have addressed this aspect of the claim chart in my analysis above.

266. Again, with regard to the fifth element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 11 or duplicates the same analysis and citations from Claim 11. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 11 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be "user workspace," which is a term not used in Claim 11. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid.

Otherwise, I have addressed this aspect of the claim chart in my analysis above.

### **Claim 23**

267. I disagree with Dr. Greenberg's opinion that the '994 Patent invalidates Claim 23 of the '761 Patent. Specifically, I disagree that the '994 Patent discloses a computer implemented context component of a web-based server for defining a first user workspace of the web-based server. Dr. Greenberg relies on applications (e.g., Documentum EDMS and SAS/PH-Clinical Software) which feed information into the middleware system in his analysis. These are not workspace as recited in Claim 23 of the '761 Patent and are not web-based systems. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

268. I disagree with Dr. Greenberg's opinion that the '994 Patent invalidates Claim 23 of the '761 Patent. Specifically, I disagree that the '994 Patent discloses a computer implemented context component which assigns one or more applications to the first user workspace as described in Claim 23. Dr. Greenberg relies on the separate applications (e.g.,

Documentum EDMS and SAS/PH-Clinical Software) feeding information into the middleware system of the '994 Patent as the user workspace. These programs are separate and independent programs which cannot be assigned to each other and do not form a workspace. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

269. For most of the elements of Claim 23, Dr. Greenberg attempts to include by reference the analysis he provided for Claims 1 and 9. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 23 because Claims 1 and 9 are directed to different systems and contain different limitations than Claim 23. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 25**

270. As discussed above, Claim 23 of the '761 Patent is valid in light of the '994 Patent. Because Claim 25 is dependent on Claim 23, Claim 25 is also valid in light of the '994 Patent. For at least this reason, the '994 Patent does not invalidate the '761 Patent.

271. Furthermore, I disagree with Dr. Greenberg's opinion that the '994 Patent discloses that the context component captures relationship data associated with a relationship between the first user workspace and at least one other user workspace. Dr. Greenberg has identified workspaces as individual and separate software applications which feed documents into the middleware system (e.g., Documentum EDMS and SAS/PH-Clinical Software). However, Dr. Greenberg cites no support for his assertion that relationship data is captured which is associated with the relationship between these separate software applications. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

272. For Claim 25, Dr. Greenberg again attempts to include by reference the analysis he provided for Claim 1. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 25 because Claim 1 is directed to different systems and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 25, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 31**

273. As discussed above, Claim 23 of the '761 Patent is valid in light of the '994 Patent. Because Claim 31 is dependent on Claim 23, Claim 31 is also valid in light of the '994 Patent. For at least this reason, the '994 Patent does not invalidate the '761 Patent. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the '761 Patent is invalid. For at least these reasons, the '994 Patent does not invalidate the '761 Patent.

**Claim 32**

274. As discussed above, Claim 23 of the '761 Patent is valid in light of the '994 Patent. Because Claim 32 is dependent on Claim 23, Claim 32 is also valid in light of the '994 Patent. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the '761 Patent is invalid. For at least this reason, the '994 Patent does not invalidate the '761 Patent.

275. Furthermore, I disagree with Dr. Greenberg's opinion that the '994 Patent discloses storing of the metadata in the storage component in association with data facilitates many-to-many functionality of the data via the metadata. The '575 Patent does not disclose that metadata is used to facilitate the functionality of two or more users using two or more data files. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

**The '313 and '648 Patents**

276. I disagree with the section of Dr. Greenberg's report that discusses that the '313 Patent and the '648 Patent anticipate the '761 Patent. First, this opinion is based on a faulty premise. As discussed above, I understand that the '313 Patent and the '648 Patent cannot be considered a single reference because a mere incorporation by reference, without more, is not sufficient to treat the two references as one. Thus, this opinion that the '313 Patent and the '648 Patent anticipate the '761 Patent is wrong because this person has failed to identify where each and every element of the asserted claims is found in a single reference. Moreover, Dr. Greenberg's reliance on two references is an implicit admission that neither the '313 Patent nor the '648 Patent by themselves discloses each element of the claims. Furthermore, Dr. Greenberg does not provide a proper obviousness analysis (which is discussed in more detail below). For example, Dr. Greenberg does not specifically identify what should be combined or the reasons for doing so. For at least these reasons, the '313 Patent and the '648 Patent do not invalidate the '761 Patent.

277. Moreover, I disagree with this opinion that the '313 Patent invalidate the '761 Patent because the '313 Patent is not prior art to the '761 Patent. Specifically, the '313 Patent was filed on December 11, 2000 and did not publish until August 8, 2002. As discussed above, the inventors of the '761 Patent conceived of the invention which resulted in the issuance of the '761 Patent no later than August 19, 1999. Furthermore, as discussed above, the earliest effective filing date of the '761 Patent is December 11, 2002. Because the '313 Patent was not filed before August 19, 1999 and did not publish before December 11, 2001, the '313 Patent is not prior art to the '761 Patent. For at least these reasons, the '313 Patent does not invalidate the '761 Patent.

278. In addition, it is my opinion that the '761 Patent is valid in light of the '313 and '648 Patents because this analysis fails to provide sufficient proof required to invalidate a patent. Specifically, the descriptions are extremely general, do not address all of the elements, and are often inaccurate as to the actual disclosure. Moreover, the citations do not support the conclusions. Therefore, it is my opinion that this person has failed to provide sufficient evidence to render the '761 invalid.

279. The opinion provided that the '313 and '648 Patents disclose all of the elements of the asserted claims of the '761 Patent is wrong for several reasons. Generally, the '313 Patent discloses a system which allows a user to avoid having to log-in to multiple applications. '313 Patent, Col. 1, ll. 20-29. Moreover, the data among these applications cannot be shared. '313 Patent, Col. 1, ll. 57-66. The '648 Patent discloses a rule-based system that controls access to facilitate HIPAA compliance. Moreover, alerts can be sent from the system if rules are broken. The '761 Patent on the other hand is a system which captures environmental and tracking information and stores the information on a storage component so that data can be shared among users in multiple contexts. '761 Patent, Col. 2, ll. 50-59; Col. 13, ll. 47-54. Therefore, it is my opinion that the premise of the '313 and '648 Patents are significantly different than, and thus do not invalidate, the '761 Patent.

280. In addition, I disagree with the opinion that the '313 and '648 Patents invalidate the '761 Patent because the '313 and '648 Patents do not disclose each and every element of the asserted claims. With regard to Claim 1, the '313 and '648 Patents do not disclose a content component nor a tracking component as provided in the '761 Patent.

281. Specifically, the '313 and '648 Patents do not disclose a context component as recited in Claim 1. Each of the citations provided in the appended chart do not teach the

capturing of context information associated with user-defined data. This is because the system in the '313 Patent is used to allow a user, such as a doctor, to access multiple applications without having to reenter log-in credentials. '313 Patent, Col. 1, l. 57 to Col. 2, l. 2. The '313 Patent does not disclose a context component that captures any information associated with user-defined data. In fact, the "context data" that the chart refers to is actually the log-in credentials which are provided by the user. '313 Patent, Col. 2, ll. 10-16. This "context data" is shared among applications so that a user does not have to keep providing the information while accessing multiple applications. The "context gestures" that the chart refers to is actually an attempt by a user to use another application. For example, the '313 Patent provides "context gestures may take any of numerous forms, but generally are responsive to a need by the user to move between application..." '313 Patent, Col. 2, ll. 20-23. With regard to the '648 Patent, Dr Greenberg does not opine the '648 Patent discloses a context component. This is because the '648 Patent does not teach a context component as recited in Claim 1 of the '761 Patent. Moreover, the '313 and '648 Patents do not teach storing metadata and user-defined data on a storage component as the '313 and '648 Patent are silent as to where any user-defined data would be stored (notably, metadata is not found anywhere in the '313 and '648 Patents). For at least these reasons, the '313 and 648 Patents do not invalidate the '761 Patent.

282. In addition, the '313 and '648 Patents do not disclose a tracking component as recited in Claim 1 of the '761 Patent. Again, the provided chart refers to "context gestures" in both the context component and the tracking component analysis which renders the analysis nonsensical. Furthermore, the chart provides no citations or analysis for the limitation "wherein the user accesses the data from the second context." In fact, the '313 Patent teaches away from the tracking component recited in Claim 1 of the '761 Patent because the references simply

disclose a system where a user moves from one application to another without having to reenter log-in information. Each application, as disclosed in the '313 Patent, has its own distinct set of data which cannot be accessed from any other application. For example, the '313 Patent provides that "a patient's primary caregiver, may wish to first view medical record data or medical images for a particular patient, and in the same session view that patient's billing account or insurance information. Without context management, the primary caregiver would be required to enter data to identify him or herself in order to log in to the various databases containing the desired information..." '313 Patent, Col. 1, ll. 57-61. Moreover, the '313 Patent teaches "a physician handling one aspect of a patient's healthcare, e.g., respiratory conditions, may be barred from modifying or accessing patient medical records having to do with the patient's other medical conditions, e.g., mental health." Moreover, the '648 Patent does not teach a tracking component as recited in Claim 1 as the disclosure lacks any reference to a context as provided in the '761 Patent, much less the tracking of a user between multiple contexts. Thus, the '313 and '648 Patents do not disclose a system which facilitates the sharing of information among users which contains a context component and tracking component as recited in Claim 1 of the '761 Patent. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

#### **Claim 4**

283. As discussed above, Claim 1 of the '761 Patent is valid in light of the '313 and '648 Patent. Because Claim 4 is dependent on Claim 1, Claim 4 is also valid in light of the '313 and '648 Patent. Notably, the claim chart provides no citations to the '648 Patent that disclose the context component of Claim 1 or the any feature of Claim 4. For at least these reasons, the '313 and '648 Patent do not invalidate the '761 Patent.



284. Furthermore, I disagree with the claim chart that the '313 and '648 Patents disclose the capturing of context information which includes a relationship between the user and at least one of an application, application data, and user environment. First, as no citations to or analysis of the '648 Patent are provided in this section of the claim chart, it is improper to assert that the '648 Patent discloses this claim. The '313 Patent also does not this claim. Notably, the claim chart's analysis reveals that his assertion is limited to only the relationship between the user (employee) and the user environment (machine) as he is unable to define the "application." Furthermore, the claim chart's definition of user environment is inconsistent as he defines it as a machine for Claim 4 but as the "context manager" for Claim 9. Moreover, the claim chart's use of the "auditor" is inconsistent as he previously asserted it as the tracking component. Here "context information" is in reference to the context component. As such, the claim chart's use of terms and functionalities are nonsensical. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

**Claim 7**

285. As discussed above, Claim 1 of the '761 Patent is valid in light of the '313 and '648 Patents. Because Claim 7 is dependent on Claim 1, Claim 7 is also valid in light of the '313 and '648 Patents. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

286. Furthermore, I disagree with the claim chart that the '313 and '648 Patents disclose wherein the data created in the first context is associated with data created in the second context. First, as no citations to or analysis of the '648 Patent are provided in this section of the claim chart, it is improper to assert that the '648 Patent discloses this claim. The '313 Patent also does not this claim. The claim chart's analysis is faulty as it fails define what he asserts to be the

“data” as used in the claim. Furthermore, the citation that the claim chart has utilized does not disclose the association of “context gestures” created in one application with “context gestures” created in a second context. *See* Greenberg Expert Report, Ex. C-7 at 56. For at least these reasons, the ‘313 and ‘648 Patents do not invalidate the ‘761 Patent.

**Claim 9**

287. I disagree with the claim chart that the ‘313 and ‘648 Patents invalidate Claim 9 of the ‘761 Patent. Specifically, I disagree that the ‘313 and ‘648 Patents disclose the computer-executable act of creating data within a user environment of a web-based computer platform via user interaction with the user environment by a user using an application, the data in the form of at least files and documents. First, as citations to the ‘648 Patent are not provided for all elements of Claim 9, it is improper to assert that the ‘648 Patent discloses this claim. The ‘313 Patent also does not disclose the elements of this claim. The claim chart’s analysis relies on an inconsistent assertion of what the “context manager” of the ‘313 Patent is. As a reminder, the claim chart previously asserted that the context manager is the context component of Claim 1. Now the claim chart declares that the context manager is the “user environment” of Claim 9. Greenberg Expert Report, Ex. C-7 at 57. The “context manager” of the ‘313 Patent is not a “user environment,” as the “context manager” is neither an environment nor a “user environment” specific to any particular user. Similarly the “context manager” is not a “web-based computing platform” as the claim chart previously asserted that it is merely a piece of the context management system. Greenberg Expert Report, Ex. C-7 at 49-50.

288. In addition, the claim chart attempts to include by reference the analysis he provided from Claim 1 and 8 into his analysis of Claim 9. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 8 are

directed to different systems and contain different limitations. Furthermore no analysis is provided of Claim 8. To the extent the claim chart has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

289. With regard to the second element of Claim 9, the claim chart simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. For example, the claim chart fails to define what he asserts to be a "user environment." The term "user environment" is not used in Claim 1. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define the "context component" and "user environment" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

290. Again, with regard to the third element of Claim 9, the claim chart simply attempts to include by reference the analysis he provided from Claim 1 or duplicates the same analysis and citations from Claim 1. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 9 because Claim 1 and Claim 9 are directed to different systems and contain different limitations. For example, the claim chart fails to define what he asserts to be the first and second "user environments," "application," and "employs." All of which are terms not used in Claim 1. The claim chart's use

of first and second “locations” is nonsensical as it requires a different definition of the same term, “user environment,” within the same claim (from “context manager” to “a particular computer”). Greenberg Expert Report, Ex. C-7 at 59. Furthermore, the chart provides no citations or analysis for the limitation “wherein the user employs at least one of the application and the data from the second environment.” To the extent the claim chart has failed to address all of the additional limitations of Claim 9, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

#### **Claim 11**

291. As discussed above, Claim 9 of the ‘761 Patent is valid in light of the ‘313 and ‘648 Patents. Because Claim 11 is dependent on Claim 9, Claim 11 is also valid in light of the ‘313 and ‘648 Patents. For at least these reasons, the ‘313 and ‘648 Patents do not invalidate the ‘761 Patent.

292. Furthermore, I disagree with the claim chart’s opinion that the ‘313 and ‘648 Patents disclose indexing context of the user environment such that a plurality of users can access the content from an associated plurality of user environments. First neither patent discusses indexing content of the user environment. Furthermore, the ‘313 Patent is directed towards a way of auditing such that an auditor can extract information from the centralized storage location to generate an audit report. Thus indexing of any content within that storage location is merely for creating an audit report not “such that a plurality of users can access the content from an associated plurality of user environments.” Furthermore, the claim chart’s analysis, again, requires that the term “user environment” to be inconsistently defined for the same claim. This time defining “user environment” as “doctor’s offices” and “accounting

departments” as well as “a particular computer.” *See* Greenberg Expert Report, Ex. C-7 at 60-61. For at least these reasons, the ‘313 and ‘648 Patents do not invalidate the ‘761 Patent.

**Claim 16**

293. The ‘313 and ‘648 Patents do not disclose Claim 16. While Dr. Greenberg’s Expert Report asserts that the ‘313 and ‘648 Patents disclose Claim 16, the corresponding claim chart specifically omits Claim 16. *Compare* Greenberg Expert Report, ¶63, with *id.*, Ex. C-7. Thus despite Dr. Greenberg’s assertion otherwise, absolutely no analysis of the ‘313 and ‘648 Patents disclosing Claim 16 is provided. For at least these reasons, the ‘313 and ‘648 Patents do not invalidate the ‘761 Patent.

**Claim 21**

294. I disagree with the claim chart that the ‘313 and ‘648 Patents invalidate Claim 21 of the ‘761 Patent. First, the claim chart continues to use an incomplete analysis to support his assertions. For example, he fails to provide citations to the ‘648 Patent that disclose all elements of Claim 21. Furthermore, I disagree that the ‘313 and ‘648 Patents disclose the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. First, as citations to the ‘648 Patent are not provided for all elements of Claim 21, it is improper to assert that the ‘648 Patent discloses this claim. The ‘313 Patent also does not disclose the elements of this claim.

295. In addition, the claim chart attempts to include by reference the analysis he provided from Claim 9 into his analysis of Claim 21. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contain different limitations. For example, the claim chart fails to define what he asserts to be a “user workspace.” The term “user workspace” is not used in Claim 9. As

a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

296. With regard to the second element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contain different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

297. Again, with regard to the third element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 9 or duplicates the same analysis and citations from Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 9 is directed to a different system and contain different limitations. For example, the claim chart fails to define what he asserts to be a "user workspace." The term "user workspace" is not used in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in

inconsistencies as he seems to define “application” and “user workspace” as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

298. Again, with regard to the fifth element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 11 or duplicates the same analysis and citations from Claim 11. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 11 is directed to a different system and contain different limitations. For example, the claim chart fails to define what he asserts to be “user workspace,” which is a term not used in Claim 11. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

**Claim 23**

299. I disagree with the claim chart’s opinion that the ‘313 and ‘648 Patents invalidate Claim 23 of the ‘761 Patent. First, as citations to the ‘648 Patent are not provided for all elements of Claim 9, it is improper to assert that the ‘648 Patent discloses this claim. The ‘313 Patent also does not disclose the elements of this claim. Second, the claim chart continues to use an incomplete analysis to support his assertions. For example, he fails to provide citations to the ‘648 Patent that disclose all elements of Claim 23. Furthermore, I disagree that the ‘313 and ‘648 Patents disclose the computer-readable medium for creating data related to user interaction of a user within a user workspace of a web-based computing platform using an application. To begin, the analysis of Claim 23 employs inconsistent definitions within the same claim, as “user

workspace” is first defined as a “point of use device” in Claim 23a1 then as software application in Claim 23b. Greenberg Expert Report, Ex. C-7 at 66-68. Furthermore, the “context manager” does not “define” the point of use machine as asserted by the claim chart. Greenberg Expert Report, Ex. C-7 at 66. Moreover, none of the claim chart’s citations teach that the “context manager,” asserted as the context component, assigns one or more applications to a “point of use device,” asserted as the first user workspace. Instead the “context manager” is generally used to pass information. To the extent the claim chart has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

300. Again, with regard to the second element of Claim 23, the claim chart simply attempts to include by reference the analysis he provided from Claim 1 and Claim 9 or duplicates the same analysis and citations from Claim 1 and Claim 9. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 23 because Claim 1 and Claim 9 are directed to a different system and contains different limitations. For example, Claim 9 is in regards to a “context,” which the claim chart previously defined as an application. Claim 23, however, requires a “user workspace,” which the claim chart inconsistently defined as “point of use device.” As such, the claim chart’s reference to the analysis of Claim 9 for Claim 23 is nonsensical. To the extent the claim chart has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the ‘761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.



**Claim 25**

301. As discussed above, Claim 25 of the '761 Patent is valid in light of the '313 and '648 Patents. Because Claim 25 is dependent on Claim 23, Claim 23 is also valid in light of the '313 and '648 Patents. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

302. Furthermore, I disagree with the claim chart that the '313 and '648 Patents disclose that the context component captures relationship data associated with a relationship between a first user workspace and at least one other user workspace. First, as no citations to or analysis of the '648 Patent are provided in this section of the claim chart, it is improper to assert that the '648 Patent discloses this claim. The '313 Patent also does not this claim. As discussed above, the claim chart is premised on unreasonably defining the context component and tracking component as the same thing. Such a reading is against the plain language of the claim. Furthermore the claim chart's definition of "user workspace" for Claim 23 was a "point of use device." As analysis for Claim 25 now defines "user workspace" as an application it is nonsensical. Moreover, the claim chart's analysis of Claim 25 with reference to the analysis of Claim 5 is improper as it was redacted. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

**Claim 31**

303. As discussed above, Claim 31 of the '761 Patent is valid in light of the '313 and '648 Patents. Because Claim 31 is dependent on Claim 23, Claim 23 is also valid in light of the '313 and '648 Patents. As no citations to or analysis of the '648 Patent are provided in this section of the claim chart, it is improper to assert that the '648 Patent discloses this claim. The '313 Patent also does not this claim. Moreover, Dr. Greenberg has failed to provide sufficient

evidence to prove that the '761 Patent is invalid. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

**Claim 32**

304. As discussed above, Claim 32 of the '761 Patent is valid in light of the '313 and '648 Patents. Because Claim 32 is dependent on Claim 23, Claim 23 is also valid in light of the '313 and '648 Patents. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

305. Furthermore, I disagree with the claim chart that the '313 and '648 Patents disclose storing the metadata in the storage component in association with data facilitates many-to-many functionality of the data via metadata. First, as no citations to or analysis of the '648 Patent are provided in this section of the claim chart, it is improper to assert that the '648 Patent discloses this claim. The '313 Patent also does not disclose the element of this claim because the "centralized storage location" stores information so that it can be extracted by an "auditor" for an audit report in compliance with HIPAA standards, not to facilitate many-to-many functionality. Moreover, Dr. Greenberg has failed to provide sufficient evidence to prove that the '761 Patent is invalid. For at least these reasons, the '313 and '648 Patents do not invalidate the '761 Patent.

**THE '761 PATENT IS NOT OBVIOUS**

306. I disagree with Dr. Greenberg's general conclusion that the '761 Patent is obvious. First, Dr. Greenberg does not provide an element by element analysis regarding any of the prior art and why those references render the '761 Patent obvious. Moreover, Dr. Greenberg fails to provide particular reasons about which references should be combined and why. Furthermore, Dr. Greenberg fails to identify any motivation or suggestion to combine particular references. Accordingly, Dr. Greenberg has not provided sufficient evidence necessary to prove

that the '761 Patent is obvious. For at least these reasons, the '761 Patent is not obvious over the prior art. To the extent Dr. Greenberg is permitted to testify regarding obviousness, or provides a specific analysis regarding obviousness, I reserve the right to respond to Dr. Greenberg's newly formed opinions.

307. Moreover, Dr. Greenberg's general opinion that Claims 9, 11, 21, 23, 25, 31 and 32 are obvious is wrong because it is based on a faulty premise. First, it is impossible to determine which aspects that Dr. Greenberg believes are obvious because he does not provide an element by element analysis. Moreover, his general opinion that anything and everything can easily be implemented on the Internet is false. A product which is available on the Internet is not the same as a product which is installed on a single computer or even a local network or intranet. There are many different protocols and even programming languages that are used in creating a web-based product. There are also many different conditions, such as intermittent availability of the network, latency, throughput, and security threats that someone has to take into account in creating a web-based product that are not considered when making a non-web-based product. For Dr. Greenberg to simply assume that one of skill in the art would be able to take any product and convert it to a web-based product is unreasonable. Notably, Dr. Greenberg does not address which prior art could be converted into a web-based product nor how one of skill in the art would be able to do so. All he states is that "it would have entailed a simple substitution of a World Wide Web-based environment in place of a non-Internet or non-web-based system to produce the systems and methods in claims 9, 11, 21, 25, 31 and 32 of the '761 patent." Dr. Greenberg does not identify what the simple substitution would be, or for which prior art. In any case, I disagree that the substitution would be simple and straight forward. Instead, it would require that

an entirely new product be created. For at least these reasons, the '761 Patent is not obvious over the prior art.

308. Dr. Greenberg's opinion with regard to Claim 16 also fails for many of the same reasons. First, Dr. Greenberg does not provide an element by element analysis, nor identify how or why certain references should be combined with each other. For example, Dr. Greenberg mentions the '403 Patent, but does not provide an element by element analysis of how the reference may be combined with other references, nor an analysis of the suggestion or motivation for combining specific references with the '403 Patent. Instead he makes the general conclusion that anything and everything can be made available on a portable wireless device. Aside from failing to provide sufficient proof to prove that the '761 Patent is invalid, Dr. Greenberg's opinion is unreasonable. It is not trivial for a program to be accessible on a portable wireless device. Like a program created for the Internet, a mobile application uses different protocols, programming languages, and must function in a wide variety of conditions that do not have to be considered when writing a software program which is installed on a desktop. For at least these reasons, the '761 Patent is not obvious over the prior art.

309. Dr. Greenberg's opinion with regard to Claim 31 also fails for many of the same reasons. First, Dr. Greenberg does not provide an element by element analysis, nor identify how or why certain references should be combined with each other. Thus, it is my opinion that Dr. Greenberg has failed to provide sufficient evidence to prove the '761 Patent is invalid. For at least these reasons, the '761 Patent is not obvious over the prior art.

310. Dr. Greenberg's opinion with regard to Claim 32 also fails for many of the same reasons. First, Dr. Greenberg does not provide an element by element analysis, nor identify how or why certain references should be combined with each other. Thus, it is my opinion that Dr.

Greenberg has failed to provide sufficient evidence to prove the '761 Patent is invalid. For at least these reasons, the '761 Patent is not obvious over the prior art.

311. Dr. Greenberg's opinion with regard to "other combinations" is vague and does not meet the requisite standard to prove that the '761 Patent is invalid. As noted above, Dr. Greenberg does not provide an element by element analysis regarding any of the prior art and why those references render the '761 Patent obvious. Moreover, Dr. Greenberg fails to provide particular reasons about which references should be combined and why. Furthermore, Dr. Greenberg fails to identify any motivation or suggestion to combine particular references. Accordingly, Dr. Greenberg has not provided sufficient evidence necessary to prove that the '761 Patent is obvious.

312. In addition, I disagree with the characterizations provided by Dr. Greenberg. I do not believe that the '575, '306, '538 and '994 Patents are readily combinable. Each of these patents teaches completely different systems as noted above. The fact that they are all assigned to Xerox is of no significance because the technologies are not similar. Dr. Greenberg provides no reasons why or how the references can be combined, likely because they cannot be combined since they involve different technology. Therefore, it is my opinion that one of ordinary skill would not have treated the Xerox references together as Dr. Greenberg has generally alleged.

313. Moreover, the Hess paper cannot be combined. Notably, Dr. Greenberg does not identify what the Hess reference can be combined with. In any case, I do not believe that the Hess paper can be combined with any of the other references because the technology is completely different than the other references, and the '761 Patent as noted above.

314. Similarly, the iManage manual cannot be combined. Notably, Dr. Greenberg does not identify what the iManage manual can be combined with. In any case, I do not believe

that the iManage can be combined with any of the other references because the technology is completely different than the other references, and the '761 Patent as noted above. Moreover, I disagree with Dr. Greenberg's general assertion that one of skill the art would have easily substituted details of another reference to produce the system claimed in the '761 Patent. First, it is unclear what those details are because Dr. Greenberg does not identify them. Furthermore, each of the references teach systems which are different from each other and the '761 Patent as noted above. Moreover, one of skill in the art would not be motivated to combine any of these references because they are technically distinct. For at least these reasons, the '761 Patent is not obvious over the prior art.

**SECONDARY CONSIDERATIONS FOR NON-OBVIOUSNESS OF THE '761 PATENT**

315. In addition the reasons provide above, it is my opinion that the '761 Patent is not obvious based on the secondary consideration for non-obviousness. Notably, Dr. Greenberg did not discuss the secondary considerations for non-obviousness in his report.

316. I understand that certain secondary factors can be taken into consideration when determining whether a patent claim is non-obvious. These secondary considerations include the invention addressing a long-felt but unresolved need, and the teaching away by others from the invention. If these secondary considerations are demonstrated then they indicate that a patent claim is non-obvious. From my knowledge of the industry, it is my opinion that the '761 Patent exhibits the secondary considerations of non-obviousness I discussed above.

317. There was long-felt unresolved need in the industry for the invention of the '761 Patent because previously available collaboration tools were insufficient for productive online collaboration. Past methods of data management demonstrate others failed in creating a tool that could effectively manage an ever-increasing amount of data used in an ever-increasing variety of

ways by an ever-increasing number of users. For example, most collaboration tools in the industry at the time was based on a folder structure where users manually name the folders and categorize files by subjectively deciding which folders to store the file in. As a result, if another user wanted to collaborate on a document, this user would be required to guess which folders the file is potentially located in, then look through each of the files of those folders. The invention in the '761 Patent breaks from this failure by creating a system which leverages user environments, context information, and metadata to provide an efficient online collaboration experience. As the collaboration of multiple users using multiple user environments can be complex, the invention in the '761 Patent also provides a tracking component for tracking of user movement from one user environment to another. Thus in my opinion, prior to the invention claimed in the '761 Patent, there was a long-felt but unresolved need for an online collaboration tool with all of the desired features described above.

318. Previous tools for collaboration taught away from the invention claimed in the '761 Patent as these tools focused its functionality to center around particular documents. As a result, these document centric tools taught away from several fundamental elements of the '761 Patent, such as tracking the movement of users moving from one "user environment" to another "user environment." Furthermore, previous tools relied on the subjective decisions of each individual user in specifying information about a document. Arguably, this was to give each individual user subjective control of where each of the documents were stored and what information is to be associated with which document. As such, this taught away from the '761 Patent's utilization of the uniform decisions made by the system. In my opinion, this indicates that the '761 Patent is not obviousness because others in the art taught away from the invention of the '761 Patent.

319. Furthermore, previous tools for sharing documents taught away from the invention claimed in the '761 Patent. This is because these tools did not leverage context metadata to provide online collaboration effectively for an ever-increasing number of users and amount of data. In my opinion, this indicates that the '761 Patent is not obviousness because others in the art taught away from the invention of the '761 Patent.

#### MATERIALITY

320. I have also read the expert report of Mr. Hughes. I understand that Mr. Hughes has submitted an opinion regarding an issue which is not in the case. Therefore, I specifically reserve the right to supplement my report regarding Mr. Hughes opinion if the issue is permitted in the case. In any case, I have briefly addressed Mr. Hughes' opinions below.

321. In my opinion, each of the facts and references cited by Mr. Hughes are not material to the patentability of the '761 Patent. In particular, these references are not material because each fails to show relevant claim limitations that were disclosed in the art already before the USPTO. For this reason, the '761 Patent is valid in light of these facts and references. Notably, Mr. Hughes' analysis is flawed from the outset as his opinion does not consider each limitation of any individual claim of the '761 Patent. Namely, Mr. Hughes states, "In my opinion, any reference that discloses capturing and storing context information about a) data and b) user interaction with the data, would have material to the patentability of claim 1 of the US Patent No. 7,139,761." As such, Mr. Hughes' test for materiality seems to ignore the tracking component found in the asserted claims. The following is an analysis of the facts and references cited by Mr. Hughes' Expert Report.



Bianco Thesis

322. The Bianco thesis is not material to the patentability of the '761 Patent. The Bianco thesis discloses a basic groupware system (which is discussed above) called DISCIPLER used for project management. *See* Bianco at 5. Groupware such as DISCIPLER were disclosed in art already before the examiner of the '761 Patent. In particular, U.S. Patent 6,622,147 ("the '147 Patent") entitled "Method and Apparatus for Group Action Processing Between Users of a Collaboration System" was considered by the examiner of the '761 Patent. The '147 Patent states, "The present invention also relates to time and action/project manage using a computer system. More specifically, the present invention relates to a method for collaboration between two or more persons for time and project management." '147 Patent, Col. 1, ll. 18-23.

323. Furthermore, similar to '147 Patent, the Bianco thesis does not teach the claims of the '761 Patent. For example, EventStream, which Mr. Hughes declares is the "key to collaboration in the DISCIPLER system," is a "read-only environment" where the "concept of the document is meaningless." *See* Bianco at 16-17. In particular, EventStream is simply a history system that records all events generated by users, ordered by the time when they occurred. Such a system merely serves to "provide graphical views of the collaborative process." *See* Bianco at 56. As such, the Bianco thesis is not material to the patentability of the '761 Patent. Notably, Dr. Greenberg did not consider this as a prior art reference in his analysis.

LifeStreams Project and LifeStreams Office.

324. The LifeStreams Project, which is discussed above, is not material to the patentability of the '761 Patent. The LifeStreams Project is similar to the EventStream in that it merely provides a graphical view. The only difference is that it is a graphical view of documents.

As such, it does not teach the claims of the '761 Patent. Accordingly, it is also not material to the patentability of the '761 Patent.

325. The description of LifeStream Office is less than a page and made up mostly of bullet points. Nevertheless, it is clear that the LifeStream Office does not disclose any claim of the '761 Patent. As Mr. Hughes acknowledges that it is merely a DMS system, the LifeStreams Project is not material to the patentability of the '761 Patent. Document management systems were already considered by the Patent Examiner of the '761 Patent. For example, the examiner cited the McKelvie reference during the prosecution of the '761 Patent. McKelvie discloses a system that "can represent the state of a collaborative document such as...document revision...etc." This system also provides the "application logic that controls editorship and revision mechanisms for the document..." See McKelvie at 46, ¶0411. As such, this kind of system is cumulative of what was already before the USPTO, thus the LifeStream Office is not material to the patentability of the '761 Patent. Notably, Dr. Greenberg did not consider this as a prior art reference in his analysis.

#### CVW System

326. The CVW reference is not material to the patentability of the '761 Patent. The CVW reference is an "Overview" of the CVW system, a collaboration system is based on virtual rooms (also discussed above). See CVW Overview at 1. "CVW allows people to gather in rooms to talk through chat or audio/video conferencing and share text and URLs with one another with their chat." *Id.* Such a system had already been disclosed before the Examiner of the '761 Patent in the form of Patent Application No. 2002/0143877. Specifically the "Background of the Invention" of Patent Application No. 2002/0143877 discloses, "Instant messaging systems allow participants in a group to see whether members of the group are logged

on to the messaging system, and allow users, i.e., participants, to chat with each other using a text-based system. Collaborative tools such as NetMeeting, similarly, allow participants to see who is currently active in the system and allow the participants to join a conference and share documents.” Furthermore, the “document” related features of the CVW system are cumulative of the DMS references previously disclosed the USPTO.

327. Mr. Hughes’ analysis of the CVW system is demonstrative of the flawed premise each of his analyses are based on. In particular, Mr. Hughes does not even claim this there is a tracking component to track user activity. Instead, he vaguely declares that “information is collected about each document...” *See* Hughes Expert Report at 13. Furthermore, citations to support for his assertions are largely absent. In fact the only citation Hughes provides for the CVW system is to the document sharing feature which is typical of DMS systems. As this approach was already presented before and considered by the USPTO, the CVW reference is not material to the patentability of the ‘761 Patent. Notably, Dr. Greenberg did not consider this as a prior art reference in his analysis.

#### iManage DMS

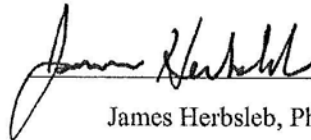
328. As described previously, the iManage DMS should be considered cumulative and thus not material because it merely embodies art that was already before the USPTO. Mr. Hughes acknowledges that iManage is merely a DMS system as he, himself refers to iManage as “iManage DMS.” *See* Hughes Expert Report at 13. As document management systems were already presented and considered by the USPTO, the iManage DMS system is also not material to the patentability of the ‘761 Patent.

329. Furthermore, the iManage DMS merely uses the same tagging approach discussed in the “Background of the Invention” of the ‘761 Patent. ‘761 Patent, Col. 2, ll. 55-59.

Moreover, the iManage DMS is dependent on the same folder structure previously discussed in the "Background of the Invention" of the '761 Patent. The iManage manual explains that it is the users who create these folders, "which are static groups of documents you can create or share with other users. Folders provide a method for organizing and sharing documents easily." See "Folders and Sub-folders" iManage manual at 25. Furthermore it is the user who decides how to categorize the documents by adding them into these folders. See "Adding Documents to a Folder" iManage manual at 29. This method of categorization is merely cumulative of the system cited by the examiner disclosed in Patent No. 6,622,147 which states, "[i]n many prior art systems, the user is required to spend time navigating around a user interface to link information to the desired lists or categories to which it pertains." See '147 Patent, Col. 1, ll. 47-50.

330. The iManage DMS is dependent on conventional methods that were previously disclosed to the PTO, thus the iManage DMS is not material to the patentability of the '761 Patent.

I declare under penalty of perjury under the laws of the State of Pennsylvania and the United States that each of the above statements is true and correct. Executed on April 22, 2010 in Pittsburg, Pennsylvania.

  
James Herbsleb, Ph.D.

**EXHIBIT A**

**James D. Herbsleb**  
Professor of Computer Science  
Director, Software Industry Center  
Institute for Software Research  
Carnegie Mellon University  
February, 2008

### Coordinates

---

5321 Wean Hall  
Pittsburgh, PA 15213  
Phone: (412) 268-8933

E-mail: [jdh@cs.cmu.edu](mailto:jdh@cs.cmu.edu)  
Web page: <http://conway.isri.cmu.edu/~jdh/>  
Fax: (412) 268-7287

### Education

---

1991-93 Postdoctoral Research Fellow, University of Michigan  
Collaborative Software Engineering

1991 M.S. University of Michigan  
Computer Science

1984 Ph.D. University of Nebraska  
Cognitive Social Psychology

1980 J.D. University of Nebraska  
Joint Program in Law and Psychology

1976 B.A. Monmouth College, Monmouth, Illinois  
Psychology and Economics

### Employment Experience

---

2002-present Professor of Computer Science, Institute for Software Research, School of  
Computer Science, Carnegie Mellon University

1996-2002 Member of Technical Staff, Software Production Research Department, Lucent  
Technologies

1994-96 Member of Technical Staff, Software Engineering Institute, Carnegie Mellon  
University

1991-93 Postdoctoral Research Fellow, University of Michigan

1992 Lecturer, Department of Psychology, University of Michigan

1988-91 Research and Teaching Assistantships, Department of Electrical Engineering and  
Computer Science, University of Michigan

1982-89 Associate Professor, Department of Psychology, Hillsdale College, Hillsdale,  
Michigan

## Publications

---

### Peer-Reviewed Journals

1. Gurbani, V.K., Garvert, A., & Herbsleb, J.D. (in press). Managing a Corporate Open Source Software Asset. To appear, *Communications of the ACM*.
2. Espinosa, A., Slaughter, S., Kraut, R., & Herbsleb, J. (2007). Familiarity, Complexity and Team Performance in Geographically Distributed Software Development. *Organization Science*, July-August, 18, pp. 613 – 630.
3. Espinosa, J. A., Slaughter, S. A., Kraut, R. E., & Herbsleb, J. D. (2007). Team Knowledge and Coordination in Geographically Distributed Software Development. *Journal of Management Information Systems*, 24, 1, pp. 5 – 12.
4. Herbsleb, J.D. & Mockus, A. (2003). An Empirical Study of Speed and Communication in Globally-Distributed Software Development. *IEEE Transactions on Software Engineering*, 29, 3, pp. 1-14.
5. Mockus, A., Fielding, R., & Herbsleb, J.D. (2002). Two Case Studies of Open Source Software Development: Apache and Mozilla. *ACM Transactions on Software Engineering and Methodology*, 11, 3, pp. 309-346.
6. Colbert, R. O., Compton, D. S., Hackbarth, R. L., Herbsleb, J. D., Hoadley, L. A., & Wills, G. J. (2001). Advanced Services: Changing How We Communicate. *Bell Labs Technical Journal*, 6(1), Jan.-Jun. 2001, pp. 211-228.
7. Herbsleb, J.D. & Moitra, D. Global Software Development. *IEEE Software*, March/April 2001, pp. 16-20.
8. El Emam, K., Goldenson, D., McCurley, J., Herbsleb, J. D. (2001). Modeling the Likelihood of Software Process Improvement: An Exploratory Study. *Empirical Software Engineering*, 6, 3, pp. 207-229.
9. Herbsleb, J. D. & Grinter, R. E. (1999). Architectures, Coordination, and Distance: Conway's Law and Beyond. *IEEE Software*, Sept/Oct 1999, pp. 63-70.
10. Herbsleb, J. D., & Kuwana, E. (1998). An Empirical Study of Information Needs in Collaborative Software Design. *Journal of the Information Processing Society of Japan*, 39, 3, 1998.
11. Herbsleb, J. D., Zubrow, D., Goldenson, D., Hayes, W., & Paulk, M. (1997). Software Quality and the Capability Maturity Model. *Communications of the ACM*, 40, 30-40.
12. Herbsleb, J. D., Klein, H., Olson, G. M., Brunner, H., Olson, J. S., and Harding, J. (1995). Object-oriented analysis and design in software project teams. *Human Computer Interaction*, 10, 249-292.
13. Olson, G. M., Herbsleb, J. D., and Rueter, H. H. (1994). Characterizing the sequential structure of interactive behaviors through statistical and grammatical techniques. *Human Computer Interaction*, 9, 427-472.
14. Herbsleb, J.D., Sales, B.D., Overcast, T.D. (1985). Challenging Licensure and Certification, *American Psychologist*, Vol. 40, pp. 1165-1178.

**Peer-Reviewed Conferences**

15. Cataldo, M., Bass, M., Herbsleb, J.D., Bass, L. (2007). On Coordination Mechanisms in Global Software Development. *International Conference on Global Software Engineering*, Munich, Germany, August 27-30, pp. 71-80.
16. Lescher, C., Bass, M., Herbsleb J.D. (2007). Collaboration in Global Software Projects at Siemens: An Experience Report. *International Conference on Global Software Engineering*, Munich, Germany, August 27-30, pp. 33-39.
17. LaToza, T.D., Garlan D., Herbsleb J.D., & Myers, B.A. (2007). Program Comprehension as Fact-Finding, in proceedings of the *European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, Dubrovnik, Croatia, September 3-7, pp. 361-370.
18. Dekel, U. & Herbsleb, J.D. (2007). Notation and Representation in Collaborative Object-Oriented Design, in Proceedings, *OOPSLA 2007*, pp. 261-280.
19. Bass, M., Herbsleb, J., Cataldo, M., Bass, L. Architectural Misalignment: An Experience Report. In Proceedings, *Sixth Working IEEE/IFIP Conference on Software Architecture*. Mumbai, India, January 6-9, 2007.
20. Balan, R.K., Gergle, D., Satyanarayanan, M., & Herbsleb, J. Simplifying Cyber Foraging for Mobile Devices. In Proceedings, *ACM International Conference on Mobile Systems, Applications, and Services*. San Juan, Puerto Rico, June 11-14. pp. 272-285.
21. Cataldo, M., Wagstrom, P., Herbsleb, J.D., Carley, K. (2006). Identification of coordination requirements: Implications for the design of collaboration and awareness tools. In Proceedings, *ACM Conference on Computer-Supported Cooperative Work*, Banff Canada, pp. 353-362. Received *Best Paper Award*.
22. Herbsleb, J.D., Mockus, A., Roberts, J.A. (2006). Collaboration in Software Engineering Projects: A Theory of Coordination. *International Conference on Information Systems*, Milwaukee, WI. Received *Best in Track Award*.
23. Mullick, N., Bass, M., Houda, Z., Sangwan, R., Paulish, D., Cataldo, M., Herbsleb, J., Bass, L. (2006). Siemens Global Studio Project: Experiences adopting an integrated GSD infrastructure. *IEEE International Conference on Global Software Engineering*.
24. Gurbani, V.K., Garvert, A., Herbsleb J.D. A Case Study of a Corporate Open Source Development Model. (2006). In Proceedings, *International Conference on Software Engineering*, Shanghai, China, May 20-25, 2006, pp. 472-481.
25. Li, P.L., Herbsleb, J., Shaw, M., Robinson, B. Experiences and Results from Initiating Field Defect Prediction and Product Test Prioritization Efforts at ABB Inc. In *Proceedings of the International Conference on Software Engineering*, Shanghai, China, May 20-25, 2006, pp. 413-423.
26. Espinosa, A., Slaughter, S. A., Herbsleb, J. D. and Kraut, R. E. (2005). Coordination Mechanisms in Globally Distributed Software Development. In *Proceedings of the First International Conference on Management of Globally Distributed Work*, Bangalore, India.



27. Li, P.L., Herbsleb, J., Shaw, M. "Forecasting Field Defect Rates Using a Combined Time-based and Metrics-based Approach: a Case Study of OpenBSD". In *Proceedings of the 16<sup>th</sup> IEEE International Symposium on Software Reliability Engineering*, Nov 2005.
28. Herbsleb, J., Paulish, D.J., Bass, M. (2005). Global Software Development at Siemens: Experience from Nine Projects. *International Conference on Software Engineering (ICSE)*, pp. 524 - 533, St. Louis, MO, May 15-21, 2005.
29. Wagstrom, P., Herbsleb, J., Carley, K. A Social Network Approach to Free/Open Source Software Simulation. To appear, the *First International Conference on Open Source Systems*, Genoa, Italy, July 11 - 15, 2005.
30. Li, P. L., Herbsleb, J., Shaw, M. Finding Predictors of Field Defects for Open Source Software Systems in Commonly Available Data Sources: a Case Study of OpenBSD (2005). To appear, IEEE International Software Metrics Symposium, 19-22 September, Como, Italy.
31. Li, P., Shaw, M., Herbsleb J., Ray, B., & Santhanam, P. (2004). Empirical Evaluation of Defect Projection Models for Widely-deployed Production Software Systems. To appear, *ACM Symposium on the Foundations of Software Engineering (FSE)*.
32. Herbsleb, J.D. & Mockus, A. (2003). Formulation and Preliminary Test of an Empirical Theory of Coordination in Software Engineering. In proceedings, *ACM Symposium on the Foundations of Software Engineering (FSE)*, Helsinki, Finland, pp. 112-121.
33. Espinosa, J. A., Kraut, R.E., Slaughter, S. A., Lerch, J. F., Herbsleb, J. D., Mockus, A. Shared mental models, familiarity, and coordination: A multi-method study of distributed software teams (2002). *International Conference on Information Systems (ICIS)*, Barcelona, Spain, December 15th – 18th, pp. 425-433.
34. Handel, M. & Herbsleb, J.D. (2002). What is Chat Doing in the Workplace? Proceedings of *ACM Conference on Computer-Supported Cooperative Work (CSCW)*, New Orleans, LA, pp. 1-10.
35. Herbsleb, J.D., Atkins, D.L., Boyer, D.G., Handel, M., & Finholt, T.A. (2002). Introducing Instant Messaging and Chat into the Workplace. In proceedings of *ACM Conference on Computer-Human Interaction (CHI)*, pages 171-178, Minneapolis, MN, April 20-25.
36. Mockus, A. & Herbsleb, J.D. Expertise Browser: A Quantitative Approach to Identifying Expertise (2002). In proceedings of *International Conference on Software Engineering (ICSE)*, pp. 503-512, Orlando, FL, May 19-25.
37. Herbsleb, J.D., Mockus, A., Finholt, T.A., & Grinter, R.E. (2001). An Empirical Study of Global Software Development: Distance and Speed. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 81-90, Toronto, Canada, May 15-18.
38. Siy, H.P., Mockus, A, Herbsleb, J.D., Krishnan, M., and Tucker, G. T. (2001). Making the software factory work: Lessons from a decade of experience. In proceedings, *Metrics 2001: Seventh International Symposium on Software Metrics*, pages 317-327, London, England, April 4-6.

39. Mockus, A. & Herbsleb, J.D. Challenges of global software development. (2001). In proceedings, *Metrics 2001: Seventh International Symposium on Software Metrics*, pages 182-184, London, England, April 4-6.
40. Espinosa, J. A., Kraut, R.E., Slaughter, S. A., Lerch, J. F., Herbsleb, J. D., Mockus, A. (2001). Shared Mental Models and Coordination in Large-Scale, Distributed Software Development. To appear in proceedings, *International Conference on Information Systems (ICIS)*, New Orleans, LA, December 16- 19.
41. Godefroid, P., Herbsleb, J.D., Jagadeesan, L.J., Li, D. (2000). Ensuring Privacy in Presence Awareness Systems: An Automated Verification Approach. In proceedings, *ACM Conference on Computer-Supported Cooperative Work (CSCW)*, pages 59-68, Philadelphia, PA, Dec. 2-7.
42. Herbsleb, J.D., Mockus, A., Finholt, T.A., & Grinter, R.E. (2000). Distance, Dependencies, and Delay in a Global Collaboration. In Proceedings, *ACM Conference on Computer-Supported Cooperative Work (CSCW)*, pages 319-328, Philadelphia, PA, Dec. 2-7.
43. Mockus, A., Fielding, R.T., & Herbsleb, J. (2000). A Case Study of Open Source Software Development: The Apache Server. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 263-272, Limerick Ireland, June 5-7.
44. Herbsleb, J. D. & Grinter, R. E. (1999). Splitting the Organization and Integrating the Code: Conway's Law Revisited. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 85-95, Los Angeles, CA, May 16-22.
45. Herbsleb, J. D. Metaphorical Representation in Collaborative Software Engineering. (1999). In proceedings, *International Joint Conference on Work Activities, Coordination, and Collaboration*, pages 117-125, San Francisco, CA, February 22-25.
46. Grinter, R. E., Herbsleb, J. D., & Perry, D. E. (1999). The Geography of Coordination: Dealing with Distance in R&D Work. In proceedings, *International Conference on Supporting Group Work*, Phoenix, AZ, November 14-17.
47. Herbsleb, J. D. & Grinter, R. E. (1998). Conceptual Simplicity Meets Organizational Complexity: Case Study of a Corporate Metrics Program. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 271-280, Kyoto, Japan, April 19-25.
48. Herbsleb, J. D. & Goldenson, D. (1996). A systematic survey of CMM experience and results. In proceedings, *International Conference on Software Engineering (ICSE)*, pages 323-330, Berlin, Germany, March 25-30.
49. Herbsleb, J. D., and Kuwana, E. (1993). Preserving knowledge in design projects: What designers need to know. In proceedings, *Human Factors in Computing Systems (CHI)*, pages 7-14, Amsterdam, The Netherlands, April 24-29.
50. Kuwana, E. and Herbsleb, J.D. (1993). Representing knowledge in requirements engineering: An empirical study of what software engineers need to know. In proceedings, *IEEE International Symposium on Requirements Engineering*, p. 273-276, San Diego, CA, January 4-6.

**Book Chapters**

51. Olson, G. M., Olson, J. S., Storrøsten, M., Carter, M., Herbsleb, J., and Rueter, H. (1996). The structure of activity during design meetings. In T. Moran & J. Carroll (Eds.) *Design Rationale: Concepts, Techniques, and Use*. Lawrence Erlbaum: Mahwah, NJ. pp. 217-239.
52. Goldenson, D.R., El Emam, K., Herbsleb, J., and Deephouse, C. (1998) Empirical studies of software process assessment methods, in T. P. Rout (ed.) *Software Process Assessment and Improvement*, Southampton, UK: Wit Press, 1998.

**Keynote addresses, Invited Talks**

53. Herbsleb, J. (2007). Global Software Engineering: The Future of Socio-technical Coordination, in *Future of Software Engineering 2007*, L. Briand and A. Wolf, Editors. 2007, IEEE-CS Press. (Invited presentation, ICSE 2007.)
54. Herbsleb, J. (2007). Open Source Ecologies. IBM Toronto, Academy of Technology Open Source Conference, February 27, 2007. (Keynote address).
55. Herbsleb, J. (2007). Aligning Coordination Behavior with Coordination Needs: Congruence in Software Development. IBM TJ Watson Research, February 13, 2007. (Invited presentation).
56. Herbsleb, J. (2007). Coordination in Engineering: Computing Task Dependencies from Work Artifacts. Boeing Phantom Works, January 9, 2007. (Invited presentation.)
57. Herbsleb, J. (2006). Coordination in GSD: Making the Invisible Visible. *International Conference on Global Software Engineering*, Florianopolis, Brazil, Oct. 16. (Keynote address)
58. Herbsleb, J. (2006). From Software Engineering to Software as Service: Computing Task Dependencies from Work Artifacts. Microsoft Research Laboratory, August 11, 2006. (Invited presentation.)
59. Herbsleb, J. (2006). Dependencies and awareness in unstable environments. Stanford University, March 22, 2006. (Invited presentation.)
60. Herbsleb, J. (2006). Overcoming the Challenges of Global Development. *OOP 2006*, Munich, Germany, January 18, 2006. (Invited presentation).
61. Herbsleb, J. (2006). What Every Commercial Developer Should Know about How Open Source Works. *OOP 2006*, Munich, Germany, January 19, 2006. (Invited presentation).
62. Herbsleb, J. (2005). Integrating organizational systems. Keynote, Siemens Technology Day 2005, Salzburg, Austria, 11/7/2005.
63. Herbsleb, J. (2005). Beyond computer science. *International Conference on Software Engineering (ICSE)*, pp. 23-27, St. Louis, MO, May 15-21, 2005 (invited presentation).
64. Herbsleb, J. (2004). Why open source works. *Open Source and Free Software: Concepts, Controversies, and Solutions*, May 9-11, University of Toronto, Toronto, Canada. <http://osconf.kmdi.utoronto.ca/default.htm> (invited presentation.)
65. Herbsleb, J. (2003). Two Cases of Open Source Software Development: Apache and Mozilla. *HBS - MIT Sloan Free/Open Source Software Conference: New Models of Software*

*Development*, June 19-20, Harvard Business School and MIT Sloan School of Business.  
<http://opensource.mit.edu/conference.html> (invited presentation.)

66. Herbsleb, J. (2002). Research Priorities in Open Source Software Development. *Advancing the Research Agenda on Free/Open Source Software*, Oct. 14, Brussels, Belgium. Institute of Infonomics, University of Maastricht and Center for Information Policy, University of Maryland. <http://www.infonomics.nl/FLOSS/workshop/> (invited presentation.)
67. Herbsleb, J., (with Atkins, D., Handel, M., Mockus, A., Perry, D., Wills, G). Global Software Development: The Bell Labs Collaboratory. In proceedings, *International Conference on Software Engineering (ICSE 2001)* Toronto, Canada, May 15-18, p. 681. (Invited presentation.)

### **Selected Other Papers**

68. Wagstrom, P. & Herbsleb, J.D. (2006). Dependency forecasting in the distributed agile organization. *Communications of the ACM*, 49 (10), pp. 55-56.
69. Shaw, M., Herbsleb, J.D., Ozkaya, I., & Root, D. (2005). Deciding What to Design: Closing a Gap in Software Engineering Education Invited paper for Education and Training Track of 27th *International Conference on Software Engineering (ICSE 2005)*, May 2005, book chapter to appear.
70. Herbsleb, J.D. & Moitra, D. Global Software Development. *IEEE Software*, March/April 2001. (Special issue, Herbsleb, J.D. & Moitra, D., Eds.)
71. Rocco, E., Finholt, T.A., Hofer, E.C., & Herbsleb, J.D. (2001, April). Out of sight, short of trust Presentation at the Founding Conference of the European Academy of Management. Barcelona, Spain.
72. Finholt, T. A., Rocco, E., Bree, D., Jain, N., & Herbsleb, J. D. NotMeeting: A Field Trial of NetMeeting in a Geographically Distributed Organization. *SIGCHI Bulletin*, April 1999.
73. Boyer, D. G., Cortes, M., Herbsleb, J. D., & Handel, Mark J. Virtual Community Presence Awareness. In Proceedings, *CSCW '98 Workshop on Designing Virtual Communities for Work*, Seattle, WA, November 14-18, 1998.
74. Herbsleb, J.D. Hard problems and hard science: On the practical limits of experimentation. (1998). *IEEE TCSE Software Process Newsletter*, No. 11, Winter 1998, 18-21.
75. Herbsleb, J. D. Supporting the emergence of abstractions in software design. (1997). *CHI 97 Workshop on Interactive Systems for Supporting the Emergence of Concepts and Ideas*.
76. Goldenson, D. & Herbsleb, J. (1995). After the appraisal: A systematic survey of process improvement, its benefits, and factors that influence success. Technical Report CMU/SEI-95-TR-009, Carnegie Mellon University.
77. Herbsleb, J., Carleton, A, Rozum, J., Siegel, J., Zubrow, D. (1994). Benefits of CMM-based software process improvement: Initial results. Technical Report CMU/SEI-94-TR-13, Carnegie Mellon University.
78. Herbsleb, J., Zubrow, D., Siegel, J., Rozum, J., Carleton, A. (1994). Software process improvement: State of the Payoff. *American Programmer*, 7, 2-12.

## Funding

---

1. National Science Foundation, IIS-0414698. Coordination, communication, and collaboration in open source software development. \$400,000. PI: Herbsleb. Co-PIs: Carley, Kraut, Mockus.
2. National Science Foundation, IIS-0534656. The role of architecture in facilitating design collaboration. \$500,000. PI: Herbsleb. Co-PIs: Garlan, Paulish.
3. Corporate funding: Siemens Corporate Research, IBM Faculty Award.
4. SEI IR&D. Understanding organizational risk in architectural design. \$246,000. With Bass & Klein.
5. Sloan Foundation. Software Industry Center.

## Selected Press Coverage

---

Open Source Development Models Fall Flat, *Computerworld*, May 12, 2004.  
<http://www.computerworld.com/printthis/2004/0,4814,93109,00.html>

You Can Surf but You Can't Hide, *New York Times*, February 7, 2002.  
<http://www.nytimes.com/2002/02/07/technology/circuits/07HERE.html?ex=1025680685&ei=1&en=f0e9040e3b056fec>

Software Development Goes Global. *Computerworld*, June 26, 2000.  
[http://www.computerworld.com/cwi/story/0,1199,NAV47\\_STO46187,00.html](http://www.computerworld.com/cwi/story/0,1199,NAV47_STO46187,00.html)

Unit of One: The Road not Taken. *Fast Company*, June 2000.  
<http://www.fastcompany.com/online/35/one.html>

## Dissertation Supervision

---

### **Committee Chair or Co-chair**

Matthew Bass, Institute for Software Research, CMU

Marcelo Cataldo (with Kathleen Carley), Institute for Software Research, SCS, CMU.

Uri Dekel, Institute for Software Research, SCS, CMU.

Peter Landwehr (with Kathleen Carley), Institute for Software Research, SCS, CMU.

Patrick Wagstrom (with Kathleen Carley), Engineering and Public Policy, CMU.

## Professional Activities

---

Associate Editor, *ACM Transactions on Software Engineering and Methodology*, 2008-present  
Editorial Board, *Empirical Software Engineering*, 2006-present  
Conference Co-Chair, *Computer-Supported Cooperative Work (CSCW)* 2004  
Program Committee, *International Conference on Software Engineering*, 2008  
Program Committee, *Foundations of Software Engineering (FSE)* 2008  
Program Committee, *Foundations of Software Engineering (FSE)* 2006  
Program Committee, *Foundations of Software Engineering (FSE)* 2004  
Program Committee, *International Conference on Software Engineering (ICSE)* 2003  
Program Co-Chair, *Human-Computer Interaction Consortium (HCIC)* 2002.  
Guest editor, Special issue of *IEEE Software* on Global Software Development (Mar./Apr. 2001)  
Reviewer, ACM Conference on *Computer-Human Interaction (CHI)*  
Reviewer, ACM Conference on *Computer-Supported Cooperative Work (CSCW)*  
Reviewer, *ACM Transactions on Information Systems (TOIS)*  
Reviewer, *IEEE Transactions on Software Engineering*  
Reviewer, *Empirical Software Engineering*  
Reviewer, *Empirical Studies of Programmers*  
Reviewer, *Human-Computer Interaction*  
Reviewer, *IBM Systems Journal*  
Member, Association for Computing Machinery

**EXHIBIT B**

**EXHIBIT B - LIST OF MATERIALS REVIEWED**

Title/Description of Document	Bates No.
U.S. Patent No. 7,139,761	LTI 000001 - 31
File History of U.S. Patent No. 7,139,761 (including cited prior art references)	
Provisional Application No. 60-432255	LTI 000742 - 60
Leader Project Functional Specification and corresponding e-mail from Michael McKibben to Brad Whiteman dated August 19, 1999	LTI 012960 - 88
Claim Construction Order dated March 9, 2010	
Leader Technologies, Inc.'s Third Supplemental Response to Facebook, Inc.'s Interrogatory No. 1, First Supplemental Response to Facebook, Inc.'s Interrogatory No. 8, and Second Supplemental Responses to Facebook, Inc.'s Interrogatories Nos. 10 and 12-17, served on November 20, 2009	
Plaintiff Leader Technologies, Inc.'s Supplemental Responses to Defendant Facebook, Inc.'s Interrogatory Nos. 1, 4, 5, 7, 10, 12-18, served on April 1, 2010	
Pseudo Code Implementation of Context and Tracking Components	
Excerpts from the deposition transcript of Jeffrey R. Lamb, dated February 19, 2010 (Exhibit B-17 to Greenberg Expert Report)	
Expert Report of Saul Greenberg, Ph.D., and all exhibits attached thereto, dated April 8, 2010	
Expert Report of James Patrick Hughes, and all exhibits attached thereto, dated April 8, 2010	
U.S. Patent No. 6,418,461	
U.S. Patent No. 6,539,371	
U.S. Patent Application Pub. No. 2002/0143877	
U.S. Patent Application Pub. No. 2003/0217096	
U.S. Patent No. 6,154,465	



Title/Description of Document	Bates No.
U.S. Patent No. 6,311,228	
U.S. Patent Application Pub. No. 2002/001301	
U.S. Patent No. 6,622,147	
U.S. Patent Application Pub. No. 2003/0069849	
U.S. Patent No. 6,714,921	
U.S. Patent Application Pub. no. 2002/0078150	
U.S. Patent No. 6,370,538	
U.S. Patent No. 6,308,179	
iManage DeskSite 6.0 - User Reference Manual	
Hess, Christopher K., <i>A Context File System for Ubiquitous Computing Environments</i> (July 2002)	
U.S. Patent No. 6,430,575	
European Patent App. No. EP 1087306	
U.S. Patent No. 7,590,934	
U.S. Patent No. 6,236,994	
U.S. Patent No. 6,941,313	
U.S. Patent No. 6,434,403	
Excerpts from Microsoft Computer Dictionary (Exhibit B-12 to Greenberg Expert Report)	
U.S. 7,346,648	
Bianco, <i>An Interface for the Visualization and Manipulation of Asynchronous Collaborative Work within the DISCIPLINE system</i> (January 2000)	LTI 134982 - 5046
Greenberg, Saul, et al., <i>Personalizable Directories: A Case Study in Automatic User Modeling</i>	

Title/Description of Document	Bates No.
Greenberg, Saul, <i>User Modeling in Interactive Computer Systems</i> (February 1984)	
Greenberg, Saul, <i>The Computer User as Toolsmith - The Use, Reuse, and Organization of Computer-based Tools</i> (Cambridge Univ. Press 1993).	
Witten, Ian H., <i>Liveware: a new approach to sharing data in social networks</i> (Int. J. Man-Machine Studies 1991).	
Witten, Ian H., and Greenberg, Saul, <i>Supporting command reuse: mechanisms for reuse</i> (Int. J. Man-Machine Studies 1993).	
Witten, Ian H., Darragh, John J., and Greenberg, Saul, <i>Predictive interfaces: what will they think of next?</i> (Cambridge Univ. Press 1995).	
Roseman, Mark, and Greenberg, Saul, <i>TeamRooms: Network Places for Collaboration</i> (ACM Press 1996).	
Greenberg, Saul, and Tauscher, Linda, <i>How people revisit web pages: empirical findings and implications for the design of history systems</i> (Int. J. Human-Computer Studies 1997).	
Greenberg, Saul, and Mark Roseman, <i>A Tour of TeamRooms</i> (ACM Press 1997)	
Cockburn, A., Greenberg, Saul, McKenzie, B., et al., <i>WebView: A Graphical Aid for Revisiting Web Pages</i> (Proceedings of the OZCH'99 Australian Conference on Human Computer Interaction 1999).	
Kaasten, S., <i>Integrating Back, History, and Bookmarks in Web Browsers</i> (Dept. of Computer Science, Univ. of Calgary 2001).	
Greenberg, Saul, <i>Context as a Dynamic Construct</i> (Human-Computer Interaction, Vol. 16, pp. 257-268, 2001).	
Tam, J., <i>Supporting Change Awareness in Visual Workspaces</i> (Dept of Computer Science, Univ. of Calgary 2002).	
Greenberg, Saul, and Roseman, M., <i>Using a Room Metaphor to Ease Transitions in Groupware</i> (MIT Press 2003).	

## **EXHIBIT C**

**Pseudo code implementation of Context and Tracking Components**

This report describes the implementation in pseudo code of a context and a context tracking functionality based on the descriptions provided in the provisional patent application. The design approach was to articulate into pseudo code a generalization of the workflow example provided in ATTACHMENT 2 of the provisional patent application. In that regards, the pseudo code contains two basic elements:

- (a) a generic application skeleton that allows the user to navigate through contexts as defined in a particular workflow (referred to as Webslice in ATTACHMENT 2) and where the change of context is identified automatically
- (b) an implementation of a context (referred to as Boards in ATTACHMENT 2)

Those two elements also utilize the source code described in the Web and WebSlice classes as described in ATTACHMENT 2 of the provisional patent application.

*Class: WebApp*

```

import java.awt.AWTEvent;
import java.awt.Menu;
import java.awt.MenuItem;
import java.awt.event.ActionListener;
import java.util.Collection;
import java.util.Iterator;
import java.util.List;

/**
 * This class represents the general skeleton of an application
 * (e.g. web based application) that would provide an end-user
 * with the basic interface to create contexts, navigate across
 * them based on the workflows relevant to the user and track
 * changes to contexts.
 */
public class WebApp {
    /* the basic elements to keep track of */
    private Collection<Web> webs;
    private Web currentUserWeb; // the specific web. It is possible to have multiple webs
                                // and the user selects one at any particular time
    private Board currentUserCtx; // the specific context within a particular web
    private WebSlice currentUserWorkFlow;
    private String userID;

    /*
     * UI elements
     */
    private Menu menuWebs;
    private Menu menuWebSlices;
    private Menu menuBoards;

    /**
     * Constructor
     * @param the User that is using the particular instance of the application
     */
    public WebApp(String userName) {
        this.userID = userName;
        this.currentUserWeb = null;
        this.currentUserCtx = null;
        this.currentUserWorkFlow = null;
        setupWebApp();
    }

    /*
     * We assume that there is some persistent repository where the definitions of Webs
     * WebSlices and Boards are stored. This method would access such data and present it
     * to the user. Upon selection of the relevant UI elements on the part of the user,
     * the basic elements (e.g. currentUserWeb, currentUserCtx, currentUserWorkFlow) would
     * be defined
     */
    public void setupWebApp() {
        /*
         * For simplicity sake, we assume that the persistent storage interface referred to
         * in page 11 of the provisional patent application (CollectionFactory)
         */
        this.webs = CollectionFactory.getPersistentCapableCollectionOfWebs();
        /*
         * At this point we would have a collection of instantiated Web objects.
         * The next step would be to present the list of available Webs to the user
         * through some UI element (e.g. a menu) so the user select the web of interest.
         */
        menuWebs = new Menu("Webs");
        menuWebSlices = new Menu("Workflows");
        menuBoards = new Menu("Contexts");
        for(Iterator iter = webs.iterator(); iter.hasNext(); ) {
            Web w = (Web) iter.next();
            menuWebs.add(new MenuItem(w.getName()));
            // getName method is defined in ATTACHMENT 2, page 12
        }
        /*
         * The UI element would have event-based mechanism such as a listener that
         * automatically detect the users' selection. Upon reception of the event,
         * the application can automatically update its internal state. Specifically,
         * once a use selects a particular Web, the variable currentUserWeb can be
         * updated and the list of available Contexts (or Boards) in the Web can be
         * retrieved and displayed.
         */
    }
}

```

```

menuWebs.addActionListener(new ActionListener() {
    public void actionPerformed(AWTEvent e) {
        MenuItem m = (MenuItem)e.getSource();
        String webName = m.getLabel();
        // the getWebByName method would iterate over the webs collection
        // and return the right object
        currentUserWeb = this.getWebByName(webName);
        currentUserCtx = null;
        currentUserWorkFlow = null;
        /*
         * We now have the a Web object. The first step is to update the
         * menus with the webslices
         */
        menuWebSlices.removeAll();
        menuBoards.removeAll();
        Collection<WebSlice> slices =
        CollectionFactory.getPersistentCapableCollectionOfWebSlices();
        for(Iterator iter = slices.iterator(); iter.hasNext(); ) {
            WebSlice ws = (WebSlice) iter.next();
            menuBoards.add(new MenuItem(ws.getName()));
        }
    }
});

/*
 * The next step is to add a listener to the menu of Workflows (webslices)
 */
menuWebSlices.addActionListener(new ActionListener() {
    public void actionPerformed(AWTEvent e) {
        MenuItem m = (MenuItem)e.getSource();
        String webSliceName = m.getLabel();
        Collection<WebSlice> slices =
        CollectionFactory.getPersistentCapableCollectionOfWebSlices();
        for(Iterator iter = slices.iterator(); iter.hasNext(); ) {
            WebSlice ws = (WebSlice) iter.next();
            if (webSliceName.equals(ws.getName())) {
                currentUserWorkFlow = ws;
            }
        }
        currentUserCtx = null;
        menuBoards.removeAll();
        /*
         * We now update the menu with the appropriate list of contexts (boards)
         */
        List boards = currentUserWeb.getBoardsList();
        // getBoardsList method is defined in ATTACHMENT 2, page 14
        for(Iterator iter = boards.iterator(); iter.hasNext(); ) {
            Board b = (Board) iter.next();
            menuBoards.add(new MenuItem(b.getName()));
        }
    }
});

/*
 * Finally, we add a listener to the menu of Contexts (Boards)
 */
menuBoards.addActionListener(new ActionListener() {
    public void actionPerformed(AWTEvent e) {
        MenuItem m = (MenuItem)e.getSource();
        String boardName = m.getLabel();
        /*
         * the getBoardByName method would iterate over the
         * currentUserWeb's list of boards and return the right
         * Board object corresponding to the boardName string
         */
        Board oldCtx = currentUserCtx;
        currentUserCtx = getBoardByName(boardName);
        if (oldCtx != null && oldCtx.getName() != currentUserCtx.getName()) {
            //The user changed contexts
            currentUserCtx.importDataFromParent(currentUserWeb,
                currentUserWorkFlow);
        }
        /*
         * At this point a particular UI element that articulates the context
         * should be updated. For instance, a list of applications as well as
         * the list of data elements that are available could be displayed
         * using the data provided by the accessor methods from the Board Class
         * such getAllDataItems(),getAllUpstreamDataItems() and getAllAppItems()
         */
    }
});

```

```
        });
    }
    /*
     *
     */
    public Web getWebByName(String name) {
        for (Iterator iter = webs.iterator(); iter.hasNext(); ) {
            Web w = (Web)iter.next();
            if (name.equals(w.getName())) {
                return w;
            }
        }
        return null;
    }
    /*
     *
     */
    public Board getBoardByName(String name) {
        List boards = currentUserWeb.getBoardsList();
        // getBoardsList method is defined in ATTACHMENT 2, page 14
        for (Iterator iter = boards.iterator(); iter.hasNext(); ) {
            Board b = (Board) iter.next();
            if (name.equals(b.getName())) {
                return b;
            }
        }
        return null;
    }
} //END-OF-CLASS
```

**Class: Board**

```

import java.util.Collection;
import java.util.HashMap;
import java.util.HashSet;
import java.util.Iterator;

/**
 * A Board represents a particular context that consists of a collection of data
 * and applications. Building the example of workflow in ATTACHMENT 2, we also
 * assume that a Board contains a collection of individuals associated with the context
 */
public class Board {
    /* the basic constituent elements of a Board */
    HashMap<String,DataItem> data; // a hash table of data objects (e.g. files, emails, etc)
    HashMap<String,AppItem> apps; // a hash table of applications
    HashSet<String> users; // a hash table of users associated with the context
                                // (following the workflow example)

    String name;

    /* another set of elements that might be useful are those data items from upstream
     * contexts in the workflow that that might be relevant to the current context
     */
    HashMap<String,DataItem> upstreamData;

    /**
     * Constructor
     * @param the name of the Board
     */
    public Board(String name) {
        this.name = name;
        data = new HashMap<String,DataItem>();
        apps = new HashMap<String,AppItem>();
        users = new HashSet<String>();

        upstreamData = new HashMap<String,DataItem>();
    }

    /*
     * As users move across contexts, they might find the need to access data items from
     * upstream context in the workflow. This method imports the data items from the
     * Board's parent nodes
     * ASSUMPTION: error would generate some appropriate exception
     */
    public void importDataFromParent(Web w, WebSlice ws) {
        if (w.contains(this)) { // we only do work if this Board belongs to the Web
                                // method defined in ATTACHMENT 2, Web class, page 13
            /*
             * get the set of boards that are part of the workflow of interest as
             * represented by the webslice
             */
            Board[] boardsInWS = ws.getBoards();
            // method defined in ATTACHMENT 2, WebSlice class, page 18
            /*
             * get the list of the parents of the current board.
             */
            Set<Boards> parents = w.getParents(this);
            // method defined in ATTACHMENT 2, Web class, page 14
            /*
             * we import data from the parents that are in the webslice
             */
            for(int i=0; i < boardsInWS.lentch() {
                if (parents.contains(boardsInWS[i])) {
                    Collection dataToImport = boardsInWS[i].getAllDataItems();
                    for(Iterator iter = dataToImport.iterator(); iter.hasNext()); {
                        DataItem ditem = (DataItem)iter.next();
                        if (!upstreamData.containsKey(ditem.id)) {
                            upstreamData.put(ditem.id,ditem);
                        }
                    }
                }
            }
        }
    }

    /*
     * A particular data item might move from context to context as the workflow
     * progresses. This method transfer an imported data item into the permanent set of
     * data items of the board.
     * ASSUMPTION: error would generate some appropriate exception

```



```

*/
public void transferDataItem(DataItem d) {
    if (!data.containsKey(d.id)) { data.put(d.id,d); }
}

/*
 * As described in ATTACHMENT 2, a particular workflow could be modified such that
 * two interrelated Boards (e.g. A->B->C->D) are merged into a combined context
 * (e.g. A->B/C->D). This method accomplishes such operation.
 * ASSUMPTION: error would generate some appropriate exception
*/
public void merge(Board src) {
    /*
     * we start by merging the data items
     */
    Collection dataToMerge = src.getAllDataItems();
    for(Iterator iter = dataToMerge.iterator(); iter.hasNext();) {
        DataItem ditem = (DataItem)iter.next();
        if (!data.containsKey(ditem.id)) { data.put(ditem.id,ditem); }
    }
    /*
     * 2nd, we merge the list of applications available in this context
     */
    dataToMerge = src.getAllAppItems();
    for(Iterator iter = dataToMerge.iterator(); iter.hasNext();) {
        AppItem ditem = (AppItem)iter.next();
        if (!apps.containsKey(ditem.id)) { apps.put(ditem.id,ditem); }
    }
    /*
     * Finally, we merge the set of users associated with the context
     */
    for(Iterator iter = src.getAllUsers(); iter.hasNext();) {
        String user = (String)iter.next();
        users.add(user);
    }
}

/*
 * accessor methods
 */
public String getName() {
    return this.name;
}
public void addDataItem(DataItem d) {
    data.put(d.id,d);
}
public void removeDataItem(String did) {
    data.remove(did);
}
public void removeDataItem(DataItem d) {
    data.remove(d.id);
}
public Collection<DataItem> getAllDataItems() {
    return data.values();
}
public DataItem getDataItem(String did) {
    return data.get(did);
}
public boolean hasDataItem(String did) {
    return data.containsKey(did);
}
public boolean hasDataItem(DataItem d) {
    return data.containsKey(d.id);
}
public Collection<DataItem> getAllUpstreamDataItems() {
    return upstreamData.values();
}
public void addAppItem(AppItem d) {
    apps.put(d.id,d);
}
public void removeAppItem(String did) {
    apps.remove(did);
}
public void removeAppItem(AppItem d) {
    apps.remove(d.id);
}
public Collection<AppItem> getAllAppItems() {
    return apps.values();
}
public AppItem getAppItem(String did) {

```

```
        return apps.get(did);
    }
    public boolean hasAppItem(String did) {
        return apps.containsKey(did);
    }
    public boolean hasAppItem(AppItem d) {
        return apps.containsKey(d.id);
    }
    public void addUser(String uid) {
        users.add(uid);
    }
    public void removeUser(String uid) {
        users.remove(uid);
    }
    public Iterator<String> getAllUsers() {
        return users.iterator();
    }
    public boolean hasUser(String uid) {
        return users.contains(uid);
    }
} //END-OF-CLASS
```

**CERTIFICATE OF SERVICE**

I, Gladys Tong, hereby certify that on April 22, 2010, I served the foregoing on the following as noted:

**BY E-MAIL**

Steven L. Caponi  
Blank Rome LLP  
1201 Market Street  
Wilmington, DE 19801

E-Mail: caponi@blankrome.com

**BY E-MAIL**

Heidi Keefe  
Mark Weinstein  
Jeffrey Norberg  
Melissa Keyes  
Cooley Godward Kronish LLP  
Five Palo Alto Square  
3000 El Camino Real  
Palo Alto, California 94306-2155  
Tel: (650) 213-0300  
Fax: (650) 213-8158

E-Mail: hkeefe@cooley.com  
E-Mail: mweinstein@cooley.com  
E-mail : jnorberg@cooley.com  
E-mail: mkeyes@cooley.com



---

Gladys Tong  
KING & SPALDING LLP  
333 Twin Dolphin Drive  
Suite 400  
Redwood Shores, CA 94065  
(650) 590-0700

in Claim 9. As a result, the claim chart's method of merely incorporating by reference results in inconsistencies as he seems to define "application" and "user workspace" as the same thing. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

176. Again, with regard to the fifth element of Claim 21, the claim chart simply attempts to include by reference the analysis he provided from Claim 11 or duplicates the same analysis and citations from Claim 11. I do not believe such incorporation by reference or duplication of analysis fully addresses all of the limitations of Claim 21 because Claim 11 is directed to a different system and contains different limitations. For example, the claim chart fails to define what he asserts to be "user workspace," which is a term not used in Claim 11. To the extent the claim chart has failed to address all of the additional limitations of Claim 21, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed this aspect of the claim chart in my analysis above.

### **Claim 23**

177. I disagree with Dr. Greenberg's opinion that the '575 Patent invalidates Claim 23 of the '761 Patent. Specifically, I disagree that the '575 Patent discloses a computer implemented context component as disclose in Claim 23. First, Dr. Greenberg is incorrect in his assertion that a view of a customized file structure is a user workspace. As discussed above, this simply a customized view of documents in a file structure (a typical hierarchical folder arrangement). In addition, none of the citations provided by Dr. Greenberg illustrate a context component assigning applications to a user workspace. The '575 Patent simply does not disclose assigning applications to these structures. Furthermore, the only application discussed is the

actual program used to create and view the customized filing structure. The argument that this application is assigned to a filing structure is nonsensical as that application is what was used to create and view the filing structure, therefore requiring that it assign itself to the filing structure. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.

178. Dr. Greenberg also attempts to include by reference the analysis he provided from Claims 1, 2, and 9 into his analysis of the first and second elements of Claim 23. I do not believe such incorporation by reference fully addresses all of the limitations of Claim 23 because Claims 1, 2, and 9 are directed to different systems than Claim 23 and contain different limitations. To the extent Dr. Greenberg has failed to address all of the additional limitations of Claim 23, it is my opinion that he has not provided sufficient evidence to prove the '761 Patent is invalid. Otherwise, I have addressed Dr. Greenberg's opinion in my analysis above.

**Claim 25**

179. As discussed above, Claim 23 of the '761 Patent is valid in light of the '575 Patent. Because Claim 25 is dependent on Claim 23, Claim 25 is also valid in light of the '575 Patent. For at least this reason, the '575 Patent does not invalidate the '761 Patent.

180. Furthermore, I disagree with Dr. Greenberg's opinion that the '575 Patent discloses that the context component captures relationship data associated with a relationship between the first user workspace and at least one other user workspace. Dr. Greenberg relies on a faulty premise for this claim because the core and customized file structures taught in the '575 Patent (which is nothing more than a customized view of a hierarchical folder structure) are not user workspaces as relied upon by Dr. Greenberg. For at least these reasons, the '575 Patent does not invalidate the '761 Patent.