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Government patent policy.  
Hearings, Eighty-ninth Congress, first session, pursuant to  
S. Res. 48 on S. 789, S. 1809, and S. 1899.

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# GOVERNMENT PATENT POLICY

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## HEARINGS

BEFORE THE

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## PATENTS, TRADEMARKS, AND COPYRIGHTS

OF THE

## COMMITTEE ON THE JUDICIARY

## UNITED STATES SENATE

## EIGHTY-NINTH CONGRESS

## FIRST SESSION

PURSUANT TO S. RES. 48

ON

S. 789, S. 1809, S. 1899, and S. 2326

## PART 2

JULY 6, 7; AUGUST 17 AND 19, 1965



Printed for the use of the Committee on the Judiciary

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1965

54-400

# GOVERNMENT PATENT POLICY

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**PART 1**

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JUNE 1, 2, AND 3, 1965

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JAN 31 1966

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owned patents and make necessary determinations of the act. It would be affirmatively charged with the duty of protecting the public interest in scientific and technological developments achieved through the activities of agencies of the U.S. Government and would be charged with the dissemination of knowledge so developed. It will undertake a program of utilization as a means of widening the uses of patents, discoveries, and new scientific and technical knowledge derived from publicly financed research. This is expected to stimulate invention and innovation, which will cut costs, produce new products, and increase per capita industrial production through efficiency and new technology.

The third feature is intended to stimulate discovery and invention in the public interest by providing for the making of generous monetary awards as well as public recognition to all persons who contribute to the United States for public use scientific and technological discoveries of significant value in the fields of national defense or public health, or to any national scientific program, without regard to the patentability of the contributions so made. I believe this will serve as an incentive, which will elicit from private, commercial, or Government scientists their best efforts on behalf of the whole country.

### III. SOME INTERNATIONAL ASPECTS OF GOVERNMENT PATENT POLICY

There are many reasons why the Government should retain title to the results of publicly financed research. One of these reasons is the effect on the country's balance of payments and the military aspects. Let me give you some specific, concrete cases.

A recent court decision in the U.S. District Court for the Northern District for the Court of Illinois (*Hazeltine Research, Inc. v. Zenith Radio Corporation*) has revealed how a firm, the Hazeltine Research, Inc., with a large patent portfolio, has prevented American firms such as Zenith, through international patent pooling arrangements, from exporting their goods to important foreign markets.

I ask consent of the chairman that the findings of fact and conclusions of law of this case be inserted into the record at the conclusion of my remarks.

Senator McCLELLAN. Without objection, so ordered.

Senator LONG. What is especially intolerable is that U.S. Government funds paid for 90 percent of the research which enabled this company to accumulate its patents. In essence, then, public funds have been used to prevent Americans from exporting their goods. Indications are that this practice is widespread, and the effects on our balance of payments are undoubtedly very serious.

It doesn't make sense to allow this to go on, and at the same time make it difficult for ordinary citizens who have saved their money for years to go on a foreign vacation or to make it hard for them to bring in gifts for their friends and families by cutting down customs exemptions from \$100 to \$50, while at the same time we spend public money to put an American corporation in a position to forbid another American corporation to export products invented and produced here.

International patent pools can also undermine our national safety. They have been used in the past to transmit military information—



even to our enemies. A good example is the case of the *Bausch & Lomb Optical Company*. Contracts between this company and Carl Zeiss of Germany resulted in Bausch & Lomb transferring to the German concern, the designs and engineering data developed with funds supplied by our own Navy Department. Senator Kilgore, of West Virginia, in a speech on the Senate floor on May 19, 1947, told of his experience after V-E Day when he discovered German binoculars made by Zeiss which were an exact duplicate of the Navy's 7.5 binoculars, which we thought were secret. The use of this patent pool enabled the entire German Army to be equipped with the latest optical instrument we had, and which was developed with public funds. In other words, Mr. Chairman, public funds were used to assist those who wanted to destroy us.

Another example of the use of international patent cartels is the case of magnesum. A cartel arrangement among I. G. Farbenindustrie, the Aluminum Co. of America and Dow Chemical Co., established Dow as the sole producer of the metal in the United States. The U.S. output was deliberately kept small because of a high-price policy followed by Dow for its own private gain and because of the Aluminum Co.'s insistence that Dow not offer a cheap substitute for aluminum. In 1938, when Hitler's Germany had a production of 12,000 tons, our own production was kept at only 2,400 tons for the advantage of a private American firm. Moreover Dow's exports were limited to a specified amount to a single customer in Great Britain, who was then preparing to defend freedom in Europe, and to certain quantities which I. G. Farbenindustrie agreed to buy. Dow, by agreement couldn't even export to the European Continent. In this particular case an international patent cartel undermined the defense programs of our allies in Europe by withholding strategic raw materials from them and kept our own country weak by restricting production of this essential material.

The pushing and shoving by private firms to get the right to patent the results of Government-financed research must be stopped. Otherwise, we shall find that most of the results of our research, paid for by the American public, will be in the hands of foreign cartels. We already have considerable material showing that this is happening. The Monopoly Subcommittee of the Senate Small Business Committee since 1962 has been studying the relationship of Government patent policy, international cartels, and their effect on our foreign trade and balance of payments.

#### IV. PHILOSOPHY OF PATENT SYSTEM

I am not suggesting that the patent system be eliminated. If Mr. Brown or Mr. Jones or anyone else can invent a good product, let him do it and patent it. And let him derive a profit from his work. But I resent the fact that the people of the United States, paying the men to do the research, and very frequently paying them for their education also, have to pay monopoly prices when they wish to use the results of research they paid for in the first place.

The power to exclude competition, the power to charge monopoly prices is the reason why private firms want to have the patent rights to the results of publicly financed research. What is their justification?

The patent system endeavors to attain the constitutional objective of promoting the progress of science and useful arts by granting to the inventor or initial investor a temporary monopoly in a new product or process. The logic of granting such monopoly rights through patents in a free enterprise system rests upon the assumption that such grants will speed up technological progress through the stimulus it provides for the undertaking and financing of industrial research and development and of new industrial ventures and that the deliberate restraint of competition which the Government institutes by granting temporary patent monopolies in the use of inventions is intended to have the ultimate objective of serving the public interest in that the gains for society resulting from this stimulation will offset the restrictions on free enterprise which the patent grant imposes.

This stimulus is considered necessary to the undertaking of extraordinary risks. No one knows in advance whether he will be successful when he undertakes research. The cost may be great. There are many businessmen who have not invested a single penny in the cost of the inventions, but are ready to imitate the new invention and compete in selling the new products or using a new process. Why, then, risk large sums of money in inventing, in developing new markets, perhaps in investing large sums in new plant and equipment? If a patent monopoly, however, can be expected to keep the imitators off for just a short while, the innovator perhaps can secure a very attractive profit. The hope for such temporary monopoly profits serves, therefore, as an incentive to take risks.

But where are the risks in Government-financed research and development contracts? As a practical matter there are none. Practically all R. & D. contracts let by Federal agencies are on a cost-plus-fixed-fee basis. No matter how expensive a project turns out to be, the costs are covered by the Government.

Mr. Chairman, if the fellow who gets this contract succeeds in spending \$100 million without finding anything, so long as he legitimately disposed of the money, he is entitled to not less than \$7 million profit for having disposed of the Federal money. This is even if he found zero, nothing. That would be about what the fixed fee is. It is usually not less than 7 percent of the volume of money the man gets to spend.

Now, you and I know that 7 percent on volume can be as much as 1,000 percent on investment. For example, Sears, Roebuck & Co., as I recall, makes about 3 percent on volume. The profit works out to about 20 percent on investment, and that is a very conservative corporation.

Take North American Aviation Corp., for example, which deals mainly in Government research and procurement contracts. In 1955 it was expected to make about a 7-percent profit on volume. That worked out to be 1,155-percent profit on its net investment, which I would say is a good return. Eleven for one. That firm won't go broke doing that.

Moreover, there is no risk in finding a market for the new product. The market is there, waiting eagerly in the form of the Federal department or agency for whom the research and development has been performed. The whole thing is practically a riskless venture for the contractor.

We have joked about this. We have said, "Well, there are some risks. He might get run over by a truck on his way home with the contract, or he might lose the contract. He might leave it in a desk drawer and forget where he left it, or he might fail to add up a column of figures right."

Those are about the kinds of risks these people take with these magnificent Government contracts. These contracts are let on a Government favoritism basis. Let's not kid ourselves. There is no way you can lose on these billions.

Even the possibility of contract cancellation cannot be considered a risk, for the firms have invested none of their own funds and are generally granted, in addition, a return well in excess of the costs.

Where an inventor has not devoted his own independent efforts and resources to the development of an invention, but has used his employer's resources, it is a well-known common law doctrine that any resulting invention is the property of the employer.

Similarly, when the contractor has used Government money or facilities or both, and has been compensated by the Government for his efforts, and I might say compensated much better than these people are compensating their own employees, there is no justification for giving them also the title to the invention so made.

In that case, it is the Government which has made the invention possible and should in all propriety get what it paid for. That is exactly what private industry does.

I was discussing this subject the other night with an executive of a large corporation and he was curious to know why the Government would do research at all. I explained the reason and you and I both understand that. He gave me the case of one of his own inventors. They paid the man well. The man invented something which in his judgment has already earned his corporation \$100 million. They gave the inventor a \$500,000 bonus, but after they had made the \$100 million and were still making more, they thought it might be well to give the inventor a little something extra. So they gave him another \$250,000.

Now, suppose this had been a relationship where the Government is on one end and the inventor on the other end. The corporation is just a contractor interposed between the Government and the same inventor who made \$750,000 with the magnificent invention. We propose, then, to give the intermediary the \$100 million and the gentleman who does the inventing gets \$750,000.

Now, what kind of sense does that make? The intermediary gets a 7-percent profit on anything he could spend, whether his inventor discovered anything or not.

#### SOME CLAIM THAT MONOPOLY NEEDED TO INSURE COMMERCIAL EXPLOITATION

Another argument advanced by those who wish to grant patent monopolies to the results of publicly financed research is that a monopoly is needed in order to bring about commercial exploitation of the invention.

In my judgment this is the most ridiculous nonsense I have run across.



Dr. Roy C. Newton, retired vice president for research of Swift & Co. made the following report to the Department of Agriculture:

The policy of the USDA with regard to patents is closely and aggressively followed in the utilization research laboratories. These utilization laboratories account for approximately 85 percent of all USDA patents.

According to this policy every effort is made—

mind you, this is a fellow from industry—

to obtain U.S. patents on all inventions made in the course of these scientific studies. The U.S. patents are assigned to the Secretary of Agriculture and free licenses are issued to any responsible American citizen or company who requests it. The rights to foreign patents revert to the inventor if at the end of 6 months the U.S. Government has decided not to file application for patents in foreign countries. In practice the Government seldom files for foreign patents which means that foreign patents can be owned by the inventors and they are free to exploit them to their own financial benefit without any requirement to report except to the Department of Internal Revenue. In discussions with industry representatives there are two complaints commonly expressed. The first of these complaints has to do with domestic patents and arises from the fact that a company cannot get even a temporary exclusive license to compensate it for the expense of commercializing the product of the invention. These people will say that this inhibits the very objective of the research which is to market new products of agriculture, because no one will put up the risk capital for such a new venture without some exclusivity to protect it. A few leading questions, however, usually develops the fact that they will go into the venture if their competitors are marking a success of it, and if the invention is good enough to be very promising to their competitor they will try to beat him to it. It is doubtful, therefore, if this policy is a serious handicap to the commercialization of new developments by utilization research.

During hearings held in March 1963, by the Monopoly Subcommittee of the Senate Small Business Committee, which I chaired, practically every witness was asked if he knew of any data, studies, or facts of any kind at all which could support the thesis that the working of inventions will be fostered by transfer of the Government's property rights to a contractor. The unanimous answer was "No." When Mr. James Webb of NASA was asked the question he stated that:

"It is a very difficult statement to prove, but anyway I will do my best for you."

When he was asked: "Offhand, you have no such facts or figures?"

He answered: "Not offhand."<sup>2</sup>

Mr. Chairman, it is well over 2 years later, and Mr. Webb has yet to supply evidence to support his contention.

On the other hand, there is considerable evidence that the very opposite is true—that when new inventions or discoveries are made freely available to the public, the technological level of our whole society is raised. Private industry itself benefits from this.

Rather than repeat myself, I would like to ask the committee to put in the record a speech that I delivered on this subject on the Senate floor on May 4, 1965.

Senator McCLELLAN. The speech may be printed in the record immediately following the conclusion of your testimony.

Senator LONG. I thank the chairman.

I also request that a speech I delivered on May 17 on the Senate floor also be put in the record.

<sup>2</sup> "Economic Aspects of Government Patent Policies," hearings before Monopoly Subcommittee of Senate Small Business Committee, p. 322.

Senator McCLELLAN. Same ruling.

Senator LONG. The latter speech presents a case history of what happens when a patent monopoly on the results of Government-financed research is given to a drug company. It is typical. In some respects it is amusing, although it is really tragic.

If you have not read it, I earnestly hope that the members of the committee will read it. I may say that the Miles Laboratories are making some effort to rebut in some part the information that I put in the record, and I will be glad to debate this subject with them. I think when I exposed this matter they said obviously Senator Long does not have all the facts. The man who did the inventing said that he was horrified at the price Miles Laboratories wanted to charge the public.

Well, perhaps I didn't have all the facts but I had a lot more than Miles Laboratories wanted me to have. I think what they were doing was charging about 40 times more than it cost to produce these little kits to test-retarded children or children who would be retarded unless you discovered an ailment that would lead to retardation. They didn't develop it, they didn't discover it. The fellow who did discover it didn't want 5 cents on it. All he wanted was the opportunity to serve his country and when he found out what kind of a fraud was perpetrated on the public as a result of him having patented this little invention, he was outraged and disgusted at the whole patent system. But that indicates to some extent how these discoveries, paid with Government money as it was in this case, by a dedicated man can be used to exploit and victimize the people of this country.

#### COMMENTS ON S. 789 AND S. 1809

Now, let me say a few words about the other two bills which purport to establish a national policy with respect to the disposition of the public's property rights.

In my judgment, S. 789 is an out and out giveaway. The principle of equity is ignored. The fact that the U.S. Government is pouring billions and billions of dollars—roughly \$15 billion a year—into research and development, the fact that over 70 percent of all the research and development in this country is paid for by the taxpayers; the fact that industries have been based on Government expenditures—these facts are not even mentioned in the bill. They are completely ignored. The virtue of this bill, however, is that it doesn't hide behind any verbiage; the public knows where it stands. The public pays for the research, and the results are given away to a contractor as his private monopoly. It is as simple as that.

S. 1809 does not offer very much more to the public. The effect can be the same as S. 789; the administration of such legislation would be almost impossible. There is not enough time to discuss this bill in great detail, but let me call your attention to a few of the provisions.

On page 4, lines 12 to 16, it provides that: Such license shall extend to its existing and future associated and affiliated companies, etc.

What precisely does this mean? Does it include foreign companies and entities of foreign governments? If so, has anyone studied the economic and political implications of this situation?

On page 6, section (8) it says that an invention shall be void when the contractor "knowingly withheld" rendering a prompt and full disclosure to that agency of such invention.

How can an invention be voided under present law and procedure? This whole section is meaningless and impossible; there is no way of revoking a patent unless fraud is proven.

Now, let us look at paragraph (9) on page 6, which provides "that nothing contained in this Act shall be construed as requiring the granting to the United States of any right or interest duly acquired in or with respect to any patent issued for any invention not made in the course of or under the contract."

What is the precise meaning of this paragraph, especially when combined with the definition of the term "made" on page 3? Does this mean that even if I thought of an idea and the Government paid to have it developed, it is not "made" under the contract? Is an idea plus a patent application without any actual reduction to practice enough to include it under this paragraph?

Is it not administratively almost impossible to prove that the invention was not conceived before the contract? It seems to me, Mr. Chairman and members of the committee, that this paragraph alone could be the basis of a mass giveaway.

Section 2(a) limits the scope of "invention" to patentable inventions (cf. sec. 2(g) of S. 1899).

S. 1809 does not establish any single agency charged with the administration and prosecution of the Government's proprietary interests. (See sec. 4 of S. 1899 to see how this should be covered.)

S. 1809 makes no affirmative provision for the collection and dissemination of scientific and technological information acquired by the United States.

I cite section 7 of S. 1899 for how this should be covered.

It contains no automatic screening provision to detect failure of the contractor to disclose fact of the making of invention under Government contract (cf. sec. 9 of S. 1899).

The Comptroller General of the United States conducted studies of Lockheed and Ramo Wooldridge, which are among the biggest Air Force research contractors. And what did he find out? The best things these fellows were discovering they had been keeping secret from the other guys for more than 4 long years. In other words, when Lockheed gets a good fuel to put a missile in the air, they say, for Pete's sake, don't let Ramo Wooldridge know about this. When Ramo Wooldridge finds out what is the best metal they say, for Pete's sake, don't let Lockheed find out. Here is a fellow, if he knows what is the best fuel, he doesn't know what is the best metal. If he knows what is the best metal, he doesn't know the best way of welding it. It is the blind leading the blind, a Tower of Babel, financed by extortion and is a complete outrage of the public interest, all for the hope that each one of these guys is going to get rich because he is the only one that knows something. They withhold knowledge even though they all signed contracts promising that they would divulge their discoveries to the Government. This is what they get paid for. They are all in violation of the contract. Many of these big corporations are in violation of their contracts and yet they keep getting more contracts. Why? Just favoritism. It might have something to do with contributions to cam-

paigns, but I don't know about that. There are very few of them that I have managed to raise money from. They have great influence and they are very charming and attractive fellows. The only thing I say about them is that they should give more to public service and demand less for it because I think they are doing pretty well the way they are going right now.

Now, back to S. 1809. It contains no provision for awards for inventive contributions (cf. sec. 9 of S. 1899).

Section 4(a) specifies conditions in which the United States is to require "principal or exclusive" rights, but does not specify what those rights are to be.

Section 4(a) specifies a too limited set of conditions under which such greater rights are to be obtained by the United States. The inference is that outside of these limited conditions, the Government's property rights will be given away to the contractor. In addition, these conditions completely fail to take into account: (a) the relative contributions of the United States and the contractor to the invention; (b) the effect upon restraint of trade.

Section 4(a) permits the grant of greater rights to the contractor in "exceptional circumstances"—whatever this means—but provides no standards whatever to guide an agency head in determining what action is in the public interest.

In this connection, Senator Ribicoff, when he was Secretary of Health, Education, and Welfare, warned about the danger in the use of the phrase "exceptional circumstances."

The phrase "in exceptional circumstances," is relatively vague and indefinite and, in the absence of any indicated criteria in the policy itself would appear to leave considerable latitude to each agency head to determine what constitutes such circumstances. While this does have the advantage of providing flexibility, it does have the disadvantage of exposing agency heads to the pressures of those contractors who would urge that each circumstance of hardship, however slight, represents an exceptional circumstance calling for more generous allocation of invention rights.

Section 4(b) too sharply limits the extent of the right the Government may acquire, without regard to the extent of the Government's contribution.

Section 4(c) again, provides no standards whatever to guide the agency head in determining what "special circumstances" are referred to, or in what way the "public interest" is to be determined.

These are only a few of the many objections I have about S. 1809.

In the days and weeks to come, I and others shall discuss this problem on the floor of the Senate, so the public at large as well as the Senate may better understand what is at stake.

S. 1809 is loaded against the public and its Government. Its net effect is that except in a few limited and nebulous cases, the private contractors are going to get private monopolies on the results of the vast sums spent on research and development by the public.

Now, Mr. Chairman and members of the committee, this morning I was at the Department of Justice discussing a controversy that involves the State of Louisiana and the Federal Government. We were talking about the tidelands controversy and precisely what a base line would be.

I admire the Solicitor General of the United States, Archibald Cox. He is an able man. He is on the other side of the issue. I am on the

Louisiana side and he is on the Federal side, but he made a very simple suggestion.

He said, look, Senator, let us quit talking about this matter as though you are representing Louisiana and I am representing the Federal Government. Let's us just assume you represent Texas Co., and I represent Gulf and that the Gulf Oil Co., is the Federal Government and the Texas Oil Co., is Louisiana.

He said, let us talk about the claim on that basis because it is my duty to talk to you about it on just that basis. That is how we are going to do business. And if I do say it, that tended to clarify the atmosphere because he feels that he is representing his client and I am representing mine. And that is how I think we ought to do whether we are lawyers or Senators or Congressmen, representing 192 million people or 3 million people for Louisiana and a similar number for Arkansas and a lesser number for North Dakota. Let us just think about this thing as though we are lawyers looking after the interests of our clients.

If you signed a \$100 million research contract with some fellow and you let him keep the patent rights to it, your stockholders wouldn't just fire you. They would probably institute criminal proceedings. They would figure that there had to be something crooked about a deal in which you spend \$100 million of their money and the fruits of it go to the fellow that you gave the money to. They would say it just had to be crooked. And they probably would wind up putting us in jail unless we could prove we were ignorant, stupid, and didn't know what we were doing.

Now, we represent over 190 million Americans. How can we justify giving these contracts for fantastic amounts and letting these people charge the folks their eyeballs for the benefit of it? Fortunately, penicillin was developed in Government laboratories in Peoria, Ill. The fellow who developed it might have had a little incentive award but his great reward will be in heaven for what he did for mankind.

Now, if he had been on one of these cost-plus-fixed-fee contracts, they could be charging you \$100 for a dose of that stuff. If you got pneumonia and needed the drug, you would either have to pay it or die.

Fortunately, as a result of penicillin being made available to any drug producer, competition brought the price per 100,000 units down from \$20 in 1943 to 2 cents in 1956 or 1,000-fold. If a private firm had a patent on it, it could just say, either you pay the price or die.

When we pay for a new development or discovery, why don't we act like representatives of the people? Just as we would act if we were a lawyer representing 3 million stockholders of some big corporation and protecting their interests. Look after them. That is what I think they are paying us for.

Now, they may have a different opinion about it but it seems to me that is what we are here for. We are here to look after their interests and to protect the public weal, not just parcel it out to a bunch of congenial pirates, and that is about what we will be doing, in my judgment, if we permit our Government's research effort to be the private domain of folks who get this \$15 billion of Government research.

Just one other matter I want to mention for a moment. There is just a lot of research we are paying for that we need not pay for at all.

This Government will go up to some outfit like Standard Oil of New Jersey and say, we would like to have a new jet fuel for a particular jet engine that we are inventing. Standard Oil of New Jersey has done enough research on their own account and knows enough about the subject so that they can do that for you without any difficulty whatever. They have got enough background information to where it is as as easy as falling off a log.

Now, oh, yes, you can force onto them a couple of hundred thousand dollars to do this, but as a practical matter if you said, "Look, here is the engine and we would like you to develop a fuel with a certain octane and certain characteristics for this engine and if you will develop it, we will be glad to give you a procurement contract and let you make a nice profit selling it to us." That is all you would have to do.

Here is the area where some people would like to confuse things by saying, "Well, these folks would not be interested in doing research if they couldn't acquire the patent rights to it. All you have got to do is say that "that is what I want and we would like you to make it for us and we will buy it from you if you will."

Those folks would be more interested in having a private patent on it than they would be in divulging what they know to you. They would rather develop it, manufacture it, and patent it, and they would rather keep their trade secrets in their own shop. All you have got to do is just tell them that you would like to have the fuel.

As a matter of fact, I have talked to lawyers on this subject who tell me they have gone to great pains to try to persuade their concerns to take Government money. Now, if these folks would rather do the research with their own money, why not let them do it. If some firm wants to do it with Government money, then why not do business the way a private corporation would do it, just say, "All right, if we are going to pay for it, we get it."

Some time ago I asked a man who was at one time the General Manager of the Atomic Energy Commission, who is one of the great executives of America, how he looked upon this problem. At first he expressed the industry point of view, but when I pressed him on it as to just what the answer should be in any given set of circumstances, he gave the very simple answer that any good businessman would give you. He said whoever pays for the research ought to have the patents.

It is just that simple. And how else can you justify a corporation having the patents? The law doesn't permit them to take out the patent in their name. They have got to employ somebody to do the inventing, and when he does the inventing, they have got him tied down by contract which says if he so much as dreams up a good idea at night, even if it is a nightmare, it belongs to them and he has got to give it to them. It is theirs, private property. They make him apply for the patent and assign it to them.

That is good business. If I were a lawyer, that is how I would draft the contract.

Now, why shouldn't we follow the advice of businessmen? They keep coming down here telling us that we should do business the way a businessman would do business. Well, why not do it? They have been urging it. Do it just that way.



I understand that the Manufacturing Chemists Association testified before you for what they want to get out of the public. I am not sure whether it is the same outfit but one of these chemical outfits a short time ago invited me to a debate. They brought some fellow down from New York—I have seen him on television sometime or other—the best hired debater that the U.S. Chamber of Commerce had. They brought him down from New York and told me they wanted to record the debate. At the time I agreed to go on, I didn't realize it was going to be a stacked deal, but I thought I was going to have some people who might be on my side. They said there would be some Government folks who would be sympathetic.

When I got there, I found they had really rigged this against Long. Everyone there was a specialist in getting something out of the Government and paying nothing for it.

So, I said, "Well, OK, you can record the debate provided you let me have a copy of that tape." This was to be played over Mutual Broadcasting System.

Well, I have done a lot of debating. I have won some and lost some. Most of them that we lost were my fault, not my partner's fault; and if I ever won a debate, I won that one. I really think I took that fellow from all sides, and when it was over with I asked for a copy of the tape. They said, "It will be coming, it will be coming." So I called back in about 3 hours: "Where is my tape"? I knew I won that one. They said, "The tape has been washed." They ran it back through and took everything off the tape.

These fellows had their best primed man down out of New York and their case is so sordid that they had to wash the tape and not let anybody hear it. And I will say to the Senators, anybody who wants to advocate this public giveaway, don't you go on that "Open End" program with someone on your side. This is an issue that must not be exposed to the press. The Washington Post in an editorial said they thought Senator Long was right about this matter. I heard from some of their people, by the grapevine, that they had never had such pressure in their lives brought to bear upon them, that all these big concerns that advertise suggested they weren't sure the Washington Post would be a proper publication to advertise in if that outfit was going to indicate that this giveaway of Government property should be discontinued.

I will say for that newspaper they had the courage to go on ahead and run another editorial. It looks as if they are still in business, which proves a point I want to make to politicians. You don't always have to bow down to these vested interests. You can fight them, give them sure hell when you think they are wrong, and still get some campaign money out of some of these fellows. You will be surprised how generous they can be from time to time. You can work for what you think is right, and if you do what in your heart and conscience you believe to be in the public interest, they will be tolerant, sympathetic, and understanding.

Why else do you think Western Electric, a subsidiary of American Telephone & Telegraph Co., is building a big plant in Louisiana after I fought that space communications bill? These fellows are more tolerant, generous, and understanding than some of us realize. They are paid to represent their corporations and their in-

terests, and they do it very well. But on the whole, they are decent guys; and we think that if you vote against them because you are sincerely convinced that they are wrong, sometimes they secretly agree with you. And my guess is that if you bring out legislation here that carefully protects the public interest, those fellows will be right in there asking for contracts, and they will still be performing the research. The only difference is they will be communicating this information to one another as they should be doing it; and when they develop something, it will benefit 190 million people instead of somebody sitting down to figure out how can he make the greatest advantage on it.

I don't want to quarrel with patent lawyers. If I were a member of the Patent Law Association I would be outraged at Senator Long for trying to keep me from getting rich at the public expense.

I don't quarrel a darn bit that they protect their interests and I am through speaking before their associations. I think they have been most kind, even letting me get out of the hall with my hat when I address them, considering the tremendous financial interests those folks have in preserving the tremendous costs for a completely unnecessary operation.

Imagine, here we spend a fortune to find how to get into outer space. We can't use it for 4 or 5 years. We have got to turn it over to a patent lawyer and let him figure out what we can do.

Here you have something that is great. Wait a minute. You haven't fenced that patent in. Do you understand what "fencing in" of a patent is? "Fencing in" means that you have something great but somebody else might be able to do something similar and save the public a fantastic amount of money. For example, what is this thing that does the same thing as quinine? Atabrine. Suppose you had developed quinine. It is good for malaria. Now, atabrine will do the same thing. If you had discovered quinine, you don't want to let the public know about this until you have also discovered atabrine because otherwise the public might not pay you a fantastic price for quinine. They might buy atabrine. So don't let the public know you have found quinine. Keep that secret and go to work and see if you can't find atabrine.

So once you have found a satisfactory way to answer the technical problem, you have to find every other way including many inferior answers to that problem. So that there is no way they can go by you.

It is similar to that old bandit who erected his castle right there at the mountain path. Nobody could go by without paying at the castle, and that is what you would have to do with these patents. You discover something, but you can't let the Nation have the benefit even though they pay for it. You have to turn it over to a patent lawyer. He has to be satisfied that there is no way they can bypass this before the invention is ever permitted to be known at all. I do say the fact that we are just 5 years behind the Russians in space is a miracle to me, the way we are doing it. But imagine us handicapping ourselves just to give some fellow a hammerhold on the public interest.

As a matter of fact, this same business developed before. I am not the first man to tell you about this. In the *Hartford Empire* case this thing was discussed at considerable length. The TNEC Committee headed by the late Joe O'Mahoney, of Wyoming, brought out to a very

considerable degree how these folks go about fencing in patents. It is kind of cute how they do some of this. If you discover something that is good, it is not always good to patent it. Our patent law is such that the patent runs 17 years from the date that it is granted and the guy who gets the reward is a fellow who discovered it first.

Look here. Here are two people. Let's say one of them discovers a new drug that would cure heart disease. He figures he wants to fence this thing in to make sure nobody discovers something parallel to it that might bypass his patent. So he is keeping it a secret. He can keep that in his bosom for 20 years or forever and when he gets ready to apply for the patent, he has got 17 years to exploit that because he was the first man to get the idea.

Now, here is another character who might be like Dr. Guthrie who is complaining about Miles Laboratory raping the public interest. This fellow perhaps discovers the same thing but he discovered it 5 hours later. He goes ahead and makes it available to the public and applies for the patent so the public can have the benefit of this.

Who do you think gets the reward? The man who wanted to benefit the public or the guy who wanted to hold it back forever to guarantee that when he really finally filed this thing for application, he could really reap the harvest.

Well, naturally, it is the guy who thought of the idea first who wanted to reap the harvest.

It seems to me we ought to do something about that. But these are the kinds of problems you get into once you start trying to compromise between right and wrong. The right of it is very simple.

In the first year of the administration of President George Washington, even before we had a patent law, this Government signed a contract with Eli Whitney to see if he couldn't develop interchangeable parts for firearms so if they had a bunch of fellows out in the woods and one would break the hammer off his rifle, he would take a hammer off another. If one had a barrel busted, he would take the hammer off that one and put it on a good barrel and go right on fighting. At least you had one good rifle instead of none.

Eli Whitney did a good job of this and made the results of his work free and available to all the people. That was the whole idea of the contract.

Now, from that date up until 1942, whenever the Department of Defense would let a contract with some fellows to do research, it would retain for the Government the patent rights on that research.

But in 1942 we were fighting for our lives in a war with Germany and Japan. Some of these large concerns had heard that President Roosevelt had called in Mr. Win-the-War and sent home Mr. New Deal. What that meant was that the war business was the most important. He wanted to get along with these fellows, try to be friendly and let them make some money out of this war while he was going on trying to win it. The large concerns were to make a profit and at the same time disputes were settled in their favor. The President didn't want to quarrel too much but wanted to get on with the war.

They came down here in 1942 and said, "Now, look, we want to change these contracts to say we retain private patent rights and they said that industry was not very much interested in doing Government research unless they could keep those private patents on Government research."

In my judgment, gentlemen, that was a bluff. You try to find out who it was that would do it. Who were these big corporations? While the American boys—you had sons yourself out there fighting, Mr. Chairman, and while your sons were out there fighting these Germans and Japanese, giving their lives fighting those people as your sons did—while they were doing that, here these companies were telling the public that “We won’t even do research, not even to protect our own hide from those Germans and Japanese. No, sir. We won’t do research for you unless we can have private patents on all the research we do.”

Well, you say, they said it. Who was that? And then they all duck for cover and pretend “it wasn’t me.”

Well, I have made some effort to find out who it was. The best I can make out of it seems that General Electric was the bell cow of that crowd.

Now, General Electric, you may recall, just a short time ago was one of the 10 electrical equipment contractors who had to go before the U.S. court and pleaded guilty in 7 cases including the turbine case and pleaded *nolo contendere* in 13 of the cases, that that company had been systematically engaging in price fixing with 9 other contractors in supplying electrical equipment to this Government. It was such a serious offense, such a serious violation of the antitrust laws, and such a horrible conspiracy that it was necessary that somebody from each company go to the penitentiary.

Now, for the record, just one guy was guilty, but don’t you think about the same way that judge thought? The whole company knew about all that. They would get together, make all this profit, and act so sanctimonious as if they didn’t know about it. When this was found out, these concerns found that they were going to have to pay damages to their customers because there is an antitrust law that says if you engage in a conspiracy to violate these antitrust laws, you owe treble damages to the guy that got hurt. So, these private customers, when they saw that General Electric and these boys had to plead guilty, then proceeded to file claims against them for the fact that they, too, had been overcharged and they asked for treble damages. I don’t think the court ever finally got around to adjusting just what it was. By the time they got through agreeing they owed \$300 million in treble damages.

So they got in touch with their tax lawyers, came down here to Washington, and got a decision that they could deduct that \$300 million against taxes as a necessary and ordinary business expense. And that was done with the Justice Department advising against it. It was done with them agreeing firmly they would never let our joint committee look at this, the Internal Revenue and Taxation Committee, not before they did it, because if they had been exposed on something like that, there would have been an uproar in the Congress and they wouldn’t be able to get away with it.

How did they get away with that? Imagine, here, if you defraud somebody out of \$100 million, you owe him \$300 million. Now, you give the first \$100 million back. That is just giving back what you stole. The other \$200 million is the profit you made, is the penalty for doing that, and the Government picks up the tab for 75 percent of that \$200 million penalty that you had to pay for defrauding your private customers.

How did they get away with that? It couldn't be but one reason, in my judgment, and, of course, I couldn't prove this and I don't pretend I can. I am just expressing my opinion and you are privileged to have yours. Influence. Influence. And how did they get all those big contracts that company has? Don't you think that has got something to do with influence, and they make a fortune at it.

But having done so, why should you let that corporation that already has 15,000 patents—15,000—why let them hog up all the Government's money and then erect a private monopoly on top of it and make people pay anywhere from 10 to 100 times the cost of producing something that we developed with Government money? It doesn't make a lot of sense to me and over a period of time if this issue is going to continue to be resolved in favor of the private concerns continuing to take advantage of the public, there are going to be more and more examples where we, as elected representatives of the people, are going to be criticized, and some of us are going to criticize others, until this issue is resolved.

I thank the Chair and members of the committee for permitting me to present my views on this matter and I will be glad to answer any questions the gentlemen might have to ask.

Senator McCLELLAN. Thank you very much, Senator. I appreciate your appearance and the very constructive statement you have given the committee.

I got interested, though, when you said you were down talking to the Solicitor General about Tidelands. Did he agree that the State should own oil and not the Federal Government?

Senator LONG. No, he didn't, Mr. Chairman.

Senator McCLELLAN. I think he is wrong, don't you?

Senator LONG. About the same experience I have had with all Solicitors. There hasn't been much difference.

Senator McCLELLAN. Any questions, Senator Burdick?

Senator BURDICK. I want to thank you, Senator Long, for your very fine testimony. I have two or three questions here that I have gleaned from your opposition.

Senator LONG. I might say to you, Senator Burdick, I may be wrong but I am not in doubt. [Laughter.]

Senator BURDICK. Well, one of the objections that has been made to your bill is that it would discourage the development at private expense of commercial applications for Government-sponsored inventions.

Senator LONG. Well, here is what Admiral Rickover said about that. He is over on the Atomic Energy Commission. Let's face it. Here are two commissioners. When this space act passed the Congress, the Senate put an amendment on it that was patterned after the Atomic Energy Act because this was just a new Government program. These people had no experience. No one had any experience in this space business. The Government was the initiator of it. And it was felt this atomic energy should be almost exclusively a Government industry, all in the Government, no private patents.

So the House held out for something where they could give away patent rights and we wound up with this mess we have over at NASA. In atomic energy we are preeminent. They don't give away patents there.

Admiral Rickover testifies to us that there is no problem, he didn't even know there was a problem. He said, "I don't have any difficulty in finding enough contractors to do work for me." He said, "My problem is that I don't have enough contracts to go around. I have got so many folks wanting these contracts that I just don't have enough contracts to go around."

Now, there may be somebody who, for his own selfish reasons, may not want to do research for the Government. If he doesn't want to, great. We have all the contractors we have any use for anyway applying, and you will find that some of the same people who make that statement to you have contracts over in Atomic Energy.

Why do they go apply for them? They are over there doing research. There is just no shortage of these people. As a practical matter, if they indicated they didn't want to do research for the Government, there is always somebody else who would be glad to do it and hire the same scientists that they would have hired. So if they say it, it is just not true.

Here is General Electric, the bell cow, saying unless National Aeronautics and Space Administration could give them patent rights in the original contract, without waiting to see what they were going to discover under the contract, they would not want to do the research.

We turned them down. What did they do? They rushed right in there and tried to hog it all up again in NASA where they couldn't get advance patents at that time. They say it, but the very guys that say it by their own actions prove themselves to be liars.

Senator BURDICK. All right, Senator. The next question is this. If your bill was passed, became law, could we use a crossflow of ideas between Government and commercial research?

Senator LONG. Well, would you mind explaining why it would not do that?

Senator BURDICK. I didn't say it.

Senator LONG. Well, I think I have indicated that it would be just the other way around. I told you about this study the General Accounting Office made on Lockheed and Thompson Ramo Wooldridge. Now, that was done out of the Department of Defense. Here Government contractors won't tell one another what they are discovering even though the contract says they have to tell one another. It requires them to do it and they won't because they are hoping they will get rich by not doing it. They are violating their own contracts.

Now, I asked the General Accounting Office if they proposed to make similar studies of other contractors and they said they thought it would be a waste of Government money because so far as they could determine, this was the prevailing practice. This is how it is. So you see, the crossflow of ideas in Government research does not exist wherever these folks hope they are going to get rich by keeping to their bosom information that should be made available the minute they discover it.

It is just the other way around and the studies by the General Accounting Office show it. These people don't debate this. They can't. They would be caught at it. And anybody who wants to get investigated, he might come clean but the odds are you will find that he has every incentive under the sun, and he is using those incentives, to hold this information up until he can get some special advantage out of it.

Senator BURDICK. Well, the next question is this. The contention of the—



Senator LONG. See, if I do say it, Senator Burdick, if you are working on a Government contract, especially if you are like a great number of these fellows who don't do research for themselves at all, they are only doing Government research—Aerojet General, for example, a big corporation—it may be doing all its business on Government cost-plus-fixed-fee contracts. And that is how a lot of them are. If all the research you are doing is Government research, then you have got no incentive to withhold the information because you aren't going to be able to keep it anyhow. It is going to be made available to the public at the time you apply for a patent. You might as well reveal it because if you try to sneak it out of the shop and take a private patent on it for your own advantage, they are going to sue you and make you put it in the public domain anyhow.

As a matter of fact, there is another study by the General Accounting Office—there was one in 1960 on the ballistic missile program. Thompson Ramo Wooldridge was more or less in charge of that, subbing it out to other contractors. The General Accounting Office found that these people who were doing research under these contracts did not want to reveal the results to the principal contractor for fear that by doing so they might lose their chance to get a private patent, and Thompson Ramo Wooldridge would get it instead of them. They found that even the subcontractor who was working for the contractor would not reveal to the contractor what he was finding out because he was afraid that the contractor would get it. This is in violation of his own contract. Although he is paid to discover something he doesn't reveal it as he is supposed to, which is to help this Government, because if he reveals it his boss, who is the prime contractor, is then going to get the patent. So the subcontractor keeps it and waits until the contract expires, and after the contract has expired, then he pretends that he did the research subsequently and then applies for a patent for himself.

That is the kind of chicanery you encounter when you let them have private patents on Government research.

I can supply this for the record if you care to have it.

Senator BURDICK. I think, Mr. Chairman, we ought to have it in the record.

Senator McCLELLAN. Very well.

Senator LONG. I will make it available. It is a fairly long study.

(The report referred to was subsequently supplied for the committee files. See p. 359 for excerpts selected by Benjamin Gordon.)

Senator BURDICK. Some illustrations will do.

Well, the third and last general objection to your bill seems to be this, that when we permit private contractors to have some patent rights they say patent incentives or inducements by having some patents, that you get a better job.

For example, one witness said that in light of the question that I asked, when a contractor enters into a contract wouldn't he do his job well without having any of these patent inducements or incentives? And he said, well, he might do it better if he had patent incentives.

What is your reply to that?

Senator LONG. Well, if that contractor is doing a poor job to begin with, you shouldn't hire him again. He ought to be fired.

It is the job of the contracting officer to ride herd on these fellows and make them perform under their contracts.

Now, sometimes these contractors are so wealthy and powerful that they have enough influence that they can manage to keep that contract and get the money even without performing, but that is your job under a contract, to insist that they do perform under it, and I do say it, some of these Government contracting officers do a magnificent job on this. Obviously they are doing a good job in Atomic Energy on this; they are doing a good job in Health, Education, and Welfare; a magnificent job over in Federal Aviation Agency.

So the truth is where you have got a good administrator, there is no real problem. FAA, for example, is fortunate to have some very fine administrators. For example, General Quesada was their administrator for a while. I have heard people describe him as the ablest officer in the Armed Services. I don't vouch for it myself, but he was a real tough administrator. Halaby who came along behind him was a very fine administrator. They have had some great administrators over there, and even though they are not bound by law to do it, they have a firm fixed policy that they don't give private patents on Government research. They also see to it that the Government gets the maximum advantage that can be achieved by this research.

So I would say that the truth about the matter is that it is just dependent upon whether you have a good contracting officer riding herd on his contractors or have a lax fellow who is the type that seems to be inefficient and even corrupt handling those contracts. It just depends on the contracting officer, whether he insists upon doing a good job; and also the contractor. You take a lousy contractor and you are not likely to get a good job anyway.

Senator BURDICK. Then it is your testimony that you don't believe patent incentives are necessary?

Senator LONG. Well, it is just this simple. You have got two ways to get something done. A patent incentive will get you a lot of inventions, and we are getting that from private industry, and when they do that, they pay for it. They pay for it, get a patent monopoly, and they presumably would make enough money on a patent monopoly to justify the risk.

Now, how do they get the research done? These corporations don't do the research themselves. They hire somebody, and the fellow who is the inventor is not going to get the patent. He is going to get paid for it, get paid for the research he does.

And it is more or less customary that you provide a fellow with a bonus or some sort of recognition if he finds something very good. But he doesn't get the patent. The patent belongs to the fellow who pays for the research and the inventor merely gets paid for the work that he does.

You can do business with these contractors two ways. You can either pay them for the work that they do and they in turn hire somebody and pay him to do it, or you can give them private patent rights and pay them.

Now, the Government is not forcing any research where we only give patent rights. No point in that. But it is ridiculous to both pay them and give them the patent rights. Either incentive would do it.

Now, the people doing the inventing, the fellow who actually gets down in that laboratory and spends these long hours at night studying and thinking up ideas and trying to figure things out, does not have any patent incentives. He gets paid—sometimes generously—for doing this. That is his job. There is no particular point in giving him a patent on it as well.

So the incentive has always been adequate so far as private industry is concerned. This is how they do business. They pay somebody to do research and so do we in every agency except the Department of Defense which paid them to do research up until 1942. The National Aeronautics and Space Administration, NASA, is supposed to take the patents but they have a right to waive it and that is where we get into mischief under NASA because these people are trying to get to where they even waive the public's property rights before they know what they are waiving.

Even with NASA it is supposed to be that they pay them to do the research rather than provide them patents for doing it.

Senator BURDICK. Now, in your wide experience, Senator, do you know whether private industry contracts with private industry for research? Does company A contract with company B?

Senator LONG. They do and almost without exception the way they do it is that if a corporation contracts with another corporation, the latter corporation will do the research, the patent rights belong to the corporation that pays for it. So that the company that does the research will have their inventors apply for the patent and then they turn it over to the company that paid for it.

Of course, it is kind of amusing how that company up in Baltimore does it the Martin Co. They are very generous. If they are doing it—if they hire somebody to do research for the Martin Co. and they use their own funds, they insist the patent rights belong to Martin Co.

Now, if that is Government money they are using and they hire another firm to do research for the Government, they will permit that fellow to keep the patent rights for himself. So, notice, if it is the taxpayers' money, they don't mind what happens to the patent rights, but if it is their own money they insist that they get what they paid for.

Senator BURDICK. In a straight commercial transaction, in your experience, the man who pays for the work retains the patent.

Senator LONG. That is right. And any corporate executive would be a fool to do it otherwise. You would get fired.

Senator BURDICK. Is that the thesis you are proceeding on?

Senator LONG. Yes, sir. We ought to do business the same way those companies would do business. We ought to do business with them the same way they do business with anybody they trade with.

Senator BURDICK. That is all. Thank you very much.

Senator LONG. Thank you.

Senator McCLELLAN. Thank you, Senator.

This committee now has concluded 3 days of hearings, during which time we have heard 17 witnesses. There are a number of witnesses, both Government and public, that desire to be heard who have not been heard, and therefore it appears that possibly 2 additional days of hearings will be necessary.

The Chair will schedule these hearings at the earliest time that can be consistent with other committee work that is also awaiting attention. There will be no undue delay. We will get to them just as soon as we can.

We have an appropriation bill coming up that I have to handle. As soon as I can get that arranged, we will proceed with further hearings on this.

The committee will stand in recess subject to call.

(Whereupon, at 4:05 p.m. the subcommittee adjourned subject to the call of the Chair.)

(The documents previously referred to, during the testimony of Senator Long, follow :)

[¶ 71,355] HAZELTINE RESEARCH, INC., V. ZENITH RADIO CORPORATION

In the United States District Court for the Northern District of Illinois, Eastern Division. Civil Action No. 59-C-1847. Dated January 25, 1965.

#### Sherman and Clayton Acts

**Patents—Package Licensing—Economic Coercion.**—Efforts by a patent holding and licensing company, engaged in the exploitation of patent rights in the electronics industry, to compel a manufacturer of radio and television sets to accept licenses for an entire package of over 500 patents, by offering to license only those patents which the manufacturer desired at royalty rates far in excess of the package rate, involved the use of one patent or group of patents as a lever to compel the acceptance of a license under others, in violation of the Sherman Act.

See Patents, Vol. 2, ¶ 5080.65.

**Patents—Pooling—Participation in Foreign Patent Pools.**—An American patent holding and licensing company, engaged in the exploitation of patent rights in the electronics industry, violated Section 1 of the Sherman Act by participating in foreign patent pools through the use of exclusive licensing arrangements either directly with the foreign pools, through its own subsidiary operating in a foreign country, or through a member of the pools, since it knew that the policy of the pools was to restrict imports by issuing licenses for sets manufactured only in the countries in which the pools operated and by enforcing patent rights against imported products, while at the same time refusing to license an American manufacturer to sell products in the foreign countries in which the pools operated.

See Patents, Vol. 2, ¶ 5055.

**Basic Rules—Sherman Act—Regulation of Foreign Trade.**—An American patent holding company which, through its participation in foreign patent pools, effectively prevented an American foreign patent manufacturer from exporting its products to the countries in which the pools operated, could not claim as a defense to Sherman Act charges that the foreign patent pools were governed solely by foreign law and were not violative of the Sherman Act, since a conspiracy to restrain the foreign commerce of the United States to which any American company is a party violates the Sherman Act irrespective of the fact that the conduct complained of occurs in whole or in part in foreign countries.

See Basic Rules, Vol. 1, ¶ 705.16.

For the plaintiff: Mason, Kolehmainen, Rathburn, and Wyss; M. Hudson Rathburn, Lawrence B. Dodds, and E. A. Ruestow, of counsel.

For the defendant: Casper W. Ooms, Dugald S. McDougal, Thomas C. McConnell, Philip J. Curtis and Francis W. Grotty (Zenith Radio Corp.).

#### PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW WITH RESPECT TO THE ANTITRUST ISSUES RAISED IN THE ANSWER AND COUNTERCLAIM

AUSTIN, District Judge: Pursuant to Rule 52(a) of the Federal Rules of Civil Procedure, the court hereby makes the following findings of fact and conclusions of law:

#### *Antitrust Issues*

I. The antitrust issues raised in the answer to this patent infringement suit and in the counterclaim for damages and injunctive relief were separately tried following the trial of the patent issues. Defendant in its answer asserted the

affirmative defense that plaintiff was misusing its patents, including the patent in suit, in violation of public policy and the Sherman Act (15 U.S.C. §§ 1 and 2) and that it, therefore, came into this court with unclean hands and is therefore barred from receiving any relief in this action. Defendant also filed a counterclaim for damages and injunctive relief pursuant to Rule 13(a) of the Federal Rules of Civil Procedure, Sections 1 and 2 of the Sherman Act (15 U.S.C. §§ 1, 2) and Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15, 26).

II. Defendant-Counterclaimant Zenith Radio Corporation, is a corporation organized and existing under the laws of the State of Delaware with its principal place of business located at 6001 W. Dickens Avenue, Chicago, Illinois, and is now and has been continuously for more than 43 years last past engaged in the development for sale and use and in the manufacture, sale and use of radio apparatus and receiving sets, and since the advent of television, television receiving sets throughout the United States and in foreign commerce, and during said period has built up a large volume of business in manufacturing and selling as the demand therefor has existed and will continue to exist, and in the shipment and sale of such apparatus in commerce between the various states of the United States and in foreign commerce, and said counter-claimant is now and has been engaged in said commerce during all of the period above stated and during all time material to this counterclaim.

#### Court Decisions

##### *Hazeltine Research, Inc. v. Zenith Radio Corp.*

##### *Patent Holding Company*

III. Counterdefendant, Hazeltine Research, Inc., the party plaintiff in this suit, is an Illinois corporation owned and operated as a wholly owned subsidiary of Hazeltine Corporation, a New York corporation, engaged in the manufacture and sale of electronic equipment and devices. The parties stipulated that for the purposes of this litigation Hazeltine Research, Inc. and its parent, Hazeltine Corporation, would be considered as one entity operating as a patent holding and licensing company, engaged in the exploitation of patent rights in the electronics industry in the United States and in foreign countries. The gross income of the Hazeltine enterprises approximates \$47 million per year.

IV. For many years plaintiff has accumulated a large number of patents, domestic and foreign, for use in its patent licensing business in the electronics industry. At the time of the filing of this suit Hazeltine had over five hundred patents and patent applications in its licensing portfolio.

##### *Package Licensing*

V. Plaintiff's policy in licensing electronics manufacturers in the United States was to grant a so-called standard package license which conferred on the licensee for a five-year period freedom from any charge of infringement under all present as well as future Hazeltine patents issuing during the term of the agreement. Royalties were required to be paid on the licensee's entire production whether its products employed any or none of the Hazeltine patents. The license was in effect a covenant not to sue the licensee or its customers should Hazeltine decide within the license period that the manufacture and sale of any particular apparatus infringed upon any of its patent rights.

VI. Hazeltine filed numerous patent infringement suits against manufacturers who refused to sign its license agreement.

VII. Prior to the instant controversy, Zenith had the standard Hazeltine package license and in May of 1959, toward the close of the last five-year license period, Hazeltine requested that the license be renewed for another five-year period at the then package rate of \$50,000 per year. Zenith refused, contending that it did not require a license under any of the patents in the package and Hazeltine countered by asserting that Zenith was infringing at least four of the Hazeltine patents in the manufacture and sale of monochrome television receivers (at that time Zenith was not manufacturing color receivers). At the same time Hazeltine made an alternative proposal to Zenith, offering to grant a monochrome license in accordance with the following formula:

Any one patent in the package would be licensed at 50 percent of the royalty rate for the entire package of over 500 patents and patent applications. Any two patents would be licensed at 80 percent of the package rate. Any three or

more patents would be licensed at 100 percent of the package rate. Hazeltine reserved the right to sue for infringement of any patent not licensed. All licenses would otherwise be subject to all the terms and conditions of the standard package form of license and would require payment of royalties on all production during the five-year term of the license irrespective of whether any patent was employed or not. The license would not cover color television receivers.

Zenith refused to sign either of the proposed agreements and on November 20, 1959 the instant suit was filed.

VIII. With the suit on file and at issue, Hazeltine continued its attempt to persuade Zenith to sign the package license. During the course of discovery proceedings Hazeltine informed Zenith that in addition to the patent in suit, Zenith was infringing at least 9 designated Hazeltine patents and applications in the manufacture and sale of its color television receivers. The old form of standard package license under all the Hazeltine patents was again tendered to Zenith for signature and Zenith again refused to sign it.

IX. On April 11, 1962, Hazeltine submitted to Zenith a license proposal for color television which provided an annual royalty rate of \$435,000 merely for the 9 patents asserted and an annual rate of \$500,000 for a license under all of Hazeltine's patents and patent applications for color television. However, if the standard package license covering all of Hazeltine's patents, for monochrome as well as color, were signed, the maximum royalty rate would be \$150,000, the same as the rate in the Hazeltine-RCA package license (later raised to \$200,000). Zenith refused these proposals on the grounds that they were obviously designed to force Zenith to take the package license which it did not want or need; that Zenith could not place itself at a competitive disadvantage by taking a license under only 9 patents at \$435,000 a year rather than signing the package license containing all Hazeltine patents at the package rate of \$150,000 per year.

#### *Alternative Package Arrangements*

X. Hazeltine continued its efforts to persuade Zenith to sign the standard package license before this case could be brought to trial. In March 1963, as the case approached the final pretrial conference, Hazeltine made the following proposal to Zenith:

It grouped together the nine patents and one application which were claimed by Hazeltine to be employed in the manufacture of Zenith color receivers. It placed a maximum royalty on this package of \$275,000 per year but for color receivers only. For the entire package containing all of Hazeltine's then existing patents for color television, an annual maximum of \$300,000 was set and for all present as well as future patents issued during the license period an annual maximum of \$310,000 was demanded for color television alone.

In this same license proposal, Hazeltine offered its entire package of present and future patents, unspecified, for both monochrome as well as color receivers for an annual maximum of \$200,000.

Under this proposal, a license could be taken, if desired, under only two of the ten patents asserted against Zenith's color receiver but it would bear an annual maximum royalty in excess of \$200,000 and would license only color receiver production, whereas the entire package of over 500 patents and applications for both monochrome as well as color receivers would bear an annual maximum of \$200,000. This proposal was obviously designed to persuade Zenith to sign the standard package license agreement which it was unwilling to do and presented to Zenith management the following alternatives:

1. Endure trials and possibly appeals on at least nine patents at a total estimated cost of over one million dollars, plus damages in the event any or all of the suits were lost.

2. Take a license under the package of ten patents and applications at a cost of \$275,000 per year for color television, or a license under the entire package of existing Hazeltine patents for color television at a cost of \$300,000 per year, or at a cost of \$310,000 per year a license covering existing and future patents of Hazeltine for color television for a five-year period. In each case Zenith would be obliged to make the royalty payment whether any of the patents licensed was used or not in Zenith's color receiver. This would still leave Zenith's entire monochrome production open to continuous attack by Hazeltine, and plaintiff's counsel had already claimed that Zenith's monochrome receiver infringed at least three patents in addition to the patent in suit.

3. Take the license for color television under two patents selected from the package of ten and pay over \$200,000 per year, but this would expose Zenith's



color production to the assertion of any or all of the color patents not licensed and subject its entire monochrome production to the assertion of any of the hundreds of patents in the Hazeltine package.

4. Take the standard package license under all patents and patent applications of Hazeltine, present and future, for both monochrome and color television at an annual maximum of \$200,000 per year. Over a five-year license period it would cost \$500,000 to \$550,000 more for a license under the small group of ten patents for color television alone than for the entire Hazeltine package covering over 500 patents and applications for monochrome as well as color television. In addition, the full package license would remove the risks of further protracted and expensive litigation or harassment whereas the more expensive license under less than the entire package would leave Zenith and its customers exposed to renewed charges of infringement based on any or all of the remaining hundreds of existing Hazeltine patents as well as all patents issuing during the term of the license. The only practical answer would be to accede to Hazeltine's demand and accept a full package license.

#### *Economic Coercion*

XI. Plaintiff's offer to license any one of its hundreds of patents for monochrome at 50 percent of the package rate, any two at 80 percent of that rate and any three or more at the full package rate was an attempt by economic coercion to force the taking of the package. This is clear from the fact that plaintiff had asserted that Zenith was infringing at least four patents in its monochrome receivers. Moreover, the reward demanded by plaintiff for a license under less than the full package of patents is in no way related to the quality of the patents since the price is determined solely by the number of patent's chosen and most of the patents in the package are characterized by Hazeltine itself as "insignificant."

XII. In all of its proposals to Zenith, Hazeltine insisted as an alternative to litigation that Zenith for a period of five years pay royalties in large sums based on its entire production of receivers whether or not any Hazeltine patent was employed in any way in its products. Plaintiff thus insists that royalties be paid on admittedly unpatented apparatus.

#### *Damages*

XIII. As of the date the trial began Defendant had been injured in its business and property as the proximate result of the acts and demands of Hazeltine, referred to above, in the amount of \$50,065. Defendant has been forced to make expenditures of money and to use the time of its officers, employees, and counsel to defend against patent infringement suit and by virtue of Hazeltine's threats of suits on other patents, defendant has been forced to expend substantial amounts of money to investigate the scope and validity of the patents asserted. The injury to Zenith's business was occasioned by the necessity that defendant make a choice among alternatives each of which had an adverse economic effect on its business. It was forced either to cease manufacturing and selling its television receivers, pay tribute with consequent increase in its costs or incur the expenses incident to the defense of protracted patent litigation. Although defendant's choice determined the nature and amount of the resulting damages, it was the necessity of having to choose that occasioned the injury.

XIV. In its counterclaim Zenith also seeks damages and injunctive relief based on plaintiff's conspiratorial activities with foreign cartels or patent pools in England, Canada, and Australia which have curtailed Zenith's export business.

#### *The British Patent Pool*

XV. The dominant radio and electronics companies in Great Britain set up the British Patent Pool into which flow thousands of patents owned or controlled by the members and those affiliated with then in the plan. Among these companies are Electric & Musical Industries Ltd., General Electric Company, Ltd., Marconi's Wireless Telegraph Co. Ltd., Philips Electrical Ltd., Pye Ltd., Murphy Radio Ltd., Rank Cintel Ltd., Standard Telephone & Cables Ltd., Gramophone Co. Ltd., E. K. Cole Ltd. and Cossor Ltd. The Hazeltine inventions and patents have been funneled into the Pool pursuant to an agreement with General Electric Co. Ltd. and the share of the Pool's income allocated to these patents is split between General Electric Co. Ltd. and Hazeltine. Pursuant to this arrangement

British inventions controlled by General Electric Co. Ltd. are licensed to Hazeltine for exclusive licensing use in its American territory and are included in its United States package licensing activities. The Hazeltine-General Electric Co. Ltd. exclusive agreements were specifically devised to get the Hazeltine patents into the British Patent Pool in a manner which would provide for G. E. C. maximum bargaining power vis-a-vis the other Pool members on the division of the Pool income.

#### *Restrictions on U.S. Exports*

XVI. Pursuant to these arrangements, General Electric Co. Ltd. on its own behalf and on behalf of Hazeltine entered into successive pooling arrangements with the other members of the British Pool wherein and whereby it was agreed that the Hazeltine patents along with the patents of all of the Pool members be licensed in the territory of Great Britain solely by the Pool and on terms and conditions determined by the members of the Pool. Each of the participating parties in all of the interrelated agreements, including Hazeltine by virtue of the exclusivity of its joint arrangements with General Electric Co. Ltd., contractually pledged that during the period of the agreements no license would be issued that would permit the export of radio and television receivers from the United States into the British market and that the only license employed by the Pool would be a standard package license limited to local manufacture. Hazeltine has been participating in this plan and arrangement since 1938, is currently participating in it and intends to continue its participation.

XVII. Hazeltine has had full knowledge of the various interrelated agreements under which the Pool operates and has operated and of the purpose and effect of the plan which is to protect the British manufacturers in the Pool against competition from television receivers made in the United States and other countries. Hazeltine contends that it has entered into these arrangements because in that manner it can obtain more income from its English patent properties than it could through its own individual effort.

#### *Licensing by the Pool*

XVIII. The Pool has always issued one form of license which, like the Hazeltine package license in the United States, covers all of the patents in the pool and requires payment of royalties on all of the licensees' production whether or not any of the patents are employed. The effect of this plan is to amass all of the patents for assertion against anyone not licensed, to prevent importers or foreign manufacturers from entering the market and to preclude the possibility of any attack by the licensees on the validity of any one patent.

#### *Policy of the Pool*

XIX. The policy of the Pool was early stated to be to cooperate in the division of territories provided by the plan and "not knowingly [to] assist any [American] company to sell in England under the protection" of the Pool patents apparatus manufactured in the United States and not licensed under the patents of the Pool's American participants. RCA and General Electric, like Hazeltine, for many years participated in the British Pool. However, as the result of antitrust litigation brought by Zenith and by the Government, RCA and General Electric were forced to cease their participation in the plan.

XX. Initially the strength of the Pool was drawn from patents on radio receivers and with the advent of television, the power of the Pool became greater than ever. Color television is the most recent innovation in the home entertainment field and Hazeltine has now become an even more important factor in the British combination because of its color television patents which Hazeltine contends has given it a "dominating position" in the color television field.

#### *Exclusion of Imports*

XXI. For years Zenith made every effort to export home receivers to distributors and dealers in the English market. On each occasion, however, the Pool threatened its distributors until they ceased buying Zenith products and no substantial trade outlets could be found which would risk handling the line since the Pool would not license the sale of imported merchandise.

XXII. As a part of the settlement of antitrust litigation brought against RCA, General Electric and Western Electric, Zenith was in 1957 granted royalty-

free worldwide rights under the inventions and patents of these companies and began to ship radios to the British market. The Pool could not assert any of these rights to prevent importation and since all basic radio patents have expired, Zenith has been able for the first time to export to and sell its radio receivers in the English market. This is not true of television apparatus however. The Pool is armed with thousands of patents from the Pool members including the British counterparts of patents asserted by Hazeltine against Zenith in the United States. Zenith has been constrained from entering the British television market by the threat of the assertion against it of pooled patents, although Zenith has successfully engineered sets for the British market and has shipped some to its English distributor with the hope that the injunctive relief sought in this suit would be granted and business on a commercial scale could be conducted.

XXIII. The manufacture in the United States of receivers for sale to exporters here or directly to importers in England (or in Canada and Australia where corresponding patent pools are operating) would risk further charges by Hazeltine of infringement of the United States patents asserted against Zenith here and Hazeltine, by virtue of its exclusive arrangements with the English companies, is contractually unable to grant a license to manufacture in the United States for export to and sale in England under the British counterparts of its domestic patents. Hazeltine's United States package license expressly states, in compliance with the restrictions involved in the pooling arrangements, that no license is granted under any patent rights of countries foreign to the United States.

XXIV. Hazeltine has always told its licensees in the United States that as a matter of policy it would never collect a second royalty on sets exported to foreign countries "where Hazeltine had complete control over its patent situation" but that with respect to England, Canada, Australia and New Zealand, where Hazeltine patents are included in an industrywide pool, the American licensees would have to make their own arrangements with such Pools.

#### The Patent Pool in Canada

XXV. The patent pool existing in Canada is called Canadian Radio Patents Limited. This organization was formed in 1926 by the General Electric Company of the United States through its subsidiary, Canadian General Electric Co., and by Westinghouse, through its subsidiary, Canadian Westinghouse. The shareholders of Canadian Radio Patents Limited are Canadian General Electric, Canadian Westinghouse, Standard Radio Mfg. Corp. Ltd., the Canadian subsidiary of Philips of Holland, Canadian Marconi and Northern Electric (an affiliate of AT&T and Western Electric). The Pool has been largely made up of Canadian manufacturers (most of which are subsidiaries of American companies) who were and are competitors of Zenith with respect to sales sought to be made in Canada. The Pool for many years has had the exclusive right to sublicense not only the patents of the member companies but also the patents of Hazeltine, RCA and a number of other foreign companies. Since 1943 Hazeltine has been an active participant in the activities of the Pool and has been receiving a substantial share of its profits. The Hazeltine patents go into the pool pursuant to an exclusive license agreement between Hazeltine and Canadian Radio Patents Limited which grants to the Pool the right to include Hazeltine's Canadian patents, present and future, in its licensing and litigation activities. This arrangement has been extended to a date beyond the filing of the instant counterclaim.

#### *Organization, Purposes and Functions*

XXVI. The organization, purposes, and functions of the Canadian Pool are, in principle, identical to those of the English Pool. Approximately 5000 patents are amassed for licensing and the only form of license available is strictly limited to manufacture in Canada. It is also a package license under all patents in the Pool and all patents issuing during the term of the license. The chief purpose of the Pool is to protect the manufacturing members and licensees from competition by American or other foreign companies seeking to export their product into Canada.

#### *Exclusion of Imports*

XXVII. The Pool's campaign against importation of radio and television receivers from the United States is highly organized and effective. Patent agents, investigators and agents of the conspiring companies as well as the Canadian manufacturers and distributors trade associations at the behest of

the Pool have systematically policed the market in order to locate and stop the sale of imported receivers and have immediately attacked by infringement suit or threat thereof any dealer found to be selling imported receivers. Warning notices addressed to importers, vendors and users of radio and television receivers advise the trade and the public that only the products of certain named local manufacturers are licensed by the Pool under "basic patents" and that even "users" of unlicensed products are subject to suit on account of patent infringement. Many advertisements run by the Pool went much further. They contained disparaging statements about imported receivers to the effect that they were cheaply made, unsatisfactory in operation, caused fires and were dangerous to use because of "shock hazard."

XXVIII. Mass attacks in the form of infringement suits were made on dealers found to be selling imported American-made radio and television receivers. Suits or the threat of suits effectively prevented dealers from handling American made sets.

XXIX. For many years Zenith attempted to set up distribution for its products in Canada but in every instance where a Canadian distributor began to sell Zenith products he was warned by the Pool to stop and return the merchandise or face expensive infringement litigation. To ward off these attacks Zenith attempted to get a license from the Pool, but in every instance it was advised by the Pool manager that importation would not be permitted and, only local manufacture would be licensed.

XXX. As a part of the settlement in the Zenith litigation against RCA, General Electric and Western Electric which involved the activities of the Canadian patent pool, Zenith obtained world-wide rights under the patents of the defendants and having obtained these and other patent licenses permitting importation into Canada, Zenith began late in 1958 to export to and sell in Canada its radio and television products through its Canadian subsidiary, Zenith Radio Corporation of Canada. The manager of the Pool, Brian McConnell, investigated the matter and informed Zenith that in order to continue this business in Canada, Zenith would be required to sign the Pool's standard package license which did not permit importation and that Zenith would have to manufacture in Canada any products it intended to sell there. The Pool manager further informed Zenith that it was infringing at least one of Hazeltine's Canadian patents and that Hazeltine's patents, as well as all of the other patents in the Pool, with the exception of those owned by Westinghouse and General Electric Company, could not be licensed for importation. With respect to the latter two companies, McConnell stated that they had instructed the Pool not to refuse to license their patents for importation. The notices to "importers, vendors or users of radio and television receivers" warning them not to purchase imported sets continued to be run by the Pool despite protests by Zenith. Shortly after the aforesaid demand made on Zenith by the manager of the Canadian Pool, the instant suit was filed.

XXXI. Hazeltine before entering into its exclusive arrangement was fully aware of the purpose and the policy of the Pool to prevent the export of American-made receivers into Canada and has worked very closely with Canadian Radio Patents Limited in its licensing activities and its campaign against importation from the United States.

#### *Effect of Canadian Law*

XXXII. The proofs establish as a fact that in the circumstances of this case the Canadian Patent Act does not require the Pool to refuse to license importation, as contended by plaintiff. Nor does the Act penalize in any way a patentee who licenses for importation where, as in this case, there is being carried on extensive manufacturing in Canada under its patents.

#### *The Australian Pool*

XXXIII. The dominant electronics company in Australia and its controlled territory is and for many years has been Amalgamated Wireless (A'sia) Limited (referred to as AWA). A number of the same companies involved in the English and Canadian cartel arrangements set up a patent pool in Australia identical in principle and purpose to the British and Canadian Pools. The patents of all of the conspiring companies funnel into the Pool which is known as Australian Radio Technical Services and Patents Company Pty. Limited (commonly called ARTS). The patents flow into ARTS through AWA, Standard

Telephone and Cables Pty. Ltd., N. V. Philips Gloeilampenfabricken, Electric and Musical Industries Ltd. (owning Marconi's and other rights for Australia), Pye, Ltd. and Neutrodyne Proprietary Limited. Neutrodyne is a controlled subsidiary of Hazeltine; the latter company owns seventy percent of its stock.

XXXIV. Under an exclusive license agreement dated September 11, 1928, but still in full force and effect, Neutrodyne is authorized to place all inventions and patents of Hazeltine into the Australian Pool and is required to see to it that all of the requirements, restrictions, and provisions of the standard package license of Hazeltine are contained in any pooling license issued thereunder. Sublicensing rights, existing and future, under all of Hazeltine's inventions have been granted the Australian Pool under this arrangement for 35 years and have been the subject of the only form of license agreement issued by the Pool, a standard package license not referring to any particular patent or invention but to all of the rights of all the conspiring companies. A standard Pool license imposes the restrictions necessary to effectuate the division of territories involved in the overall arrangements. It requires the licensee to agree not to export or import or sell or offer for sale in Australia any radio or television receiving apparatus not manufactured in Australia. Hazeltine has been fully aware of the Pool's plan and policy not to license for importation and has cooperated with and approved the operation of the Pool with respect to all the Hazeltine Australian patents.

XXXV. The standard package form of Hazeltine license covering all patents subject to licensing by the Pool and requiring royalty payment whether or not any such patent is used in the licensed apparatus, is employed by each Pool referred to in these findings and is also used by Hazeltine in the United States in order to prevent attacks by licensees on any of the patents of the participating companies in any of the markets covered by these findings.

#### Damages Sustained by Zenith

XXXVI. The foreign commerce of Zenith has been drastically curtailed by the patent Pools in England, Canada and Australia. The damages Zenith has sustained were estimated by experienced officials of Zenith, thoroughly familiar with the business problems and sales potentials in the markets involved. They determined the approximate damages sustained by a thorough study of each of the markets involved and all relevant factors including tariffs, shipping costs and manufacturing problems. Zenith's foreign commerce has been damaged by the Pools in the following amounts during the 4-year statutory damage period:

Canada :	
Television.....	\$5, 826, 896
Radio.....	470, 495
England :	
Television.....	8, 079, 859
Radio.....	1, 169, 067
Australia :	
Television.....	625, 786
Radio.....	66, 769
Total.....	16, 238, 872

#### Conclusions of Law

1. The court has jurisdiction to determine the antitrust issues under the provisions of the Act of Congress approved July 2, 1890, entitled "An Act To Protect Trade and Commerce Against Unlawful Restraints and Monopolies," commonly known as the Sherman Act.

#### Package Licensing

2. Plaintiff's demands on defendant coupled with the bringing of this suit and the threat to bring other suits on other patents constitute an illegal effort to coerce Defendant into signing the Hazeltine package license.

3. The policy of plaintiff, reflected in the demands made on defendant and action taken against it, was to grant no license unless under all of its hundreds of patents for a fixed royalty, is one of unlawful coercion contrary to public policy.

4. The reward sought by plaintiff from defendant for inventions to be licensed in no way related to the quality of the individual patents and under the package license each patent drew strength from the others, thus unlawfully extending the monopoly of each.

5. Plaintiffs' offer to license its patents individually but at royalty rates far in excess of the package rate was never an alternative to its controlling policy to grant defendant a license only under all of its patents. Rather, it was proposed by Hazeltine in the later stages of its negotiations in the instant case to cloak the harshness of the original demand by seemingly meeting the request of defendant in that regard. Although it may be said that the Hazeltine proposals on the surface were offers to treat of individual patents, the design was quite apparent—to force by unlawful coercion the acceptance of unwarranted patents. This constituted an illegal extension of the patent monopolies. Whatever may be the asserted reason or attempted justification of Hazeltine, its efforts to compel defendant to accept a package of patents involved the use of one patent or group of patents as a lever to compel the acceptance of a license under others. Such a licensing scheme under applicable decisions of The Supreme Court is illegal and constitutes a misuse of the patents involved.

VI. There is a further feature of Plaintiff's licensing practices that in and of itself constitutes an illegal attempt to extend the patent monopolies. The license agreement, whether it be under a single patent or under Hazeltine's entire patent package, requires the payment of royalties in large sums for a period of five years on the entire production of the licensee whether or not any licensed patent is employed in any way in the licensee's products. Plaintiff's demands that royalties be paid on admittedly unpatented apparatus constitute misuse of its patent rights and plaintiff cannot justify such use of the monopolies of its patents, by arguing the necessities and convenience to it of such a policy. While parties in an arms-length transaction are free to select any royalty base that may suit their mutual convenience, a patentee has no right to demand or force the payment of royalties on unpatented products.

VII. The defense of misuse asserted by defendant is a valid one.

#### The Patent Pools

VIII. Every act in furtherance of a general plan to restrain trade and commerce, foreign or domestic, in violation of the Sherman Act, is illegal regardless of whether such act or acts when standing alone and absent conspiracy could be found to be legal.

#### Conspiracy

IX. It is fundamental that an unlawful conspiracy may be and often is formed without simultaneous action or agreement on the part of conspirators. Acceptance of an invitation to participate in a plan, the necessary consequence of which, if carried out, is to restrain commerce, is sufficient to establish a conspiracy under the Sherman Act. Knowledge of a scheme that illegally restrains trade and participation in the plan with such knowledge is all that is required to establish a conspiracy under the antitrust laws and prior agreements need not be shown to have been made between each and all of the conspirators in order to establish a violation of the Sherman Act.

#### Purpose of Pools

X. The combinations represented by the patent pools in Canada, England and Australia had as their express purpose the prevention of importation into those markets of radio and television apparatus made in the United States and other countries. Hazeltine knowing of the restrictions against imports imposed by those Pools nevertheless chose to permit its patents to be used in furtherance of the scheme and thereby obtained a substantial share of the Pool's income. It thereby became a co-conspirator and legally liable for all the acts of the Pools and its members performed in furtherance of their patent licensing plan to divide markets and prevent competition from imported sets.

XI. Hazeltine's method of placing its patents in the foreign pools—the use of exclusive license agreements either directly with the Pool as in Canada or through a pool member, as in England, or through a subsidiary, as in Australia—is the traditional means employed in the formation of illegal cartels and it is no defense to say that the particular exclusive licenses to which Hazeltine was a party did not in and of themselves impose the illegal restriction. The character and effect of a conspiracy are not to be judged by dismembering it and viewing its separate parts but only by looking at it as a whole.



*Intent*

XII. Hazeltine's defense that it had no intent to restrain trade and that it participated in the Pools for business reason has no legal validity. If good business reasons and expressions of good intent would serve as a defense for restraining trade, the Sherman Act would be rendered impotent and would afford no aid to the free flow of commerce.

*Applicability of Sherman Act*

XIII. Hazeltine's claimed defense that conspiracies by American companies with companies abroad are governed solely by foreign law and are not violative of the Sherman Act has no legal validity. It is well established that a conspiracy to restrain the domestic or foreign commerce of the United States to which any American company is a party violates the Sherman Act irrespective of the fact that the conduct complained of occurs in whole or in part in foreign countries.

XIV. By virtue of its arrangements in connection with the Pools in Canada, England and Australia, Hazeltine has violated Section 1 of the Sherman Act.

XV. Counterclaimant has established that it has been injured in its business by virtue of the unlawful conspiracy and acts performed in furtherance thereof. As a co-conspirator Hazeltine is liable for those damages.

XVI. Counterclaimant is entitled to the injunctive relief sought in the counterclaim.

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INITIAL REPORT ON REVIEW ON ADMINISTRATIVE MANAGEMENT OF THE BALLISTIC MISSILE PROGRAM OF THE DEPARTMENT OF THE AIR FORCE BY THE COMPTROLLER GENERAL OF THE UNITED STATES—DATED MAY 19, 1960—REPORT No. B-133042 PP. 37-52

CONTRACTORS ARE LIKELY TO COOPERATE AND EXCHANGE INFORMATION MORE FULLY WITH A GOVERNMENT STAFF THAN WITH A POTENTIAL COMPETITOR

The fact that a private contractor functioning as systems engineer and technical director is a potential competitor tends to discourage participating contractors from providing the full cooperation in exchange of information considered so vital in the complex ballistic missile program. Even though the systems engineer and technical director may be barred under his contract from engaging in manufacturing activities in connection with the programs assigned to him, the likelihood that the know-how being developed may be used by him to compete for production in related fields and in future programs is a deterrent to full cooperation by the participating contractors. This handicap to complete exchange of information would be avoided if the systems engineering and technical direction were performed by a Government staff.

The need for closely integrated activities among contractors engaged in developing and producing components of a major weapons system is well recognized. In the highly complex Air Force ballistic missile program, involving numerous contractors engaged in concurrent development and production of several separate but related missile systems, the need for full cooperation and free exchange of information is even more important to progress under the program. The Secretary of the Air Force has stressed the need to have objective and disinterested technical advice in order to give everyone concerned in the program the confidence that he should have. As the Secretary stated during congressional hearings in February 1959:

"It was also recognized that the management organization must be disinterested and objective in all its decisions and actions. By their nature decisions in a development program are likely to be controversial. In this program, any possibility of self-serving considerations on the part of the program management could cause delay and loss of confidence in the program."

In order to carry out the technical direction and systems engineering of the Air Force ballistic missile program, it has been necessary that R-W/STL become intimately familiar with the activities and operations of the numerous contractors engaged in research, development, and production for this program. Because of the unique position of R-W/STL in the Air Force ballistic missile program, both the Air Force and R-W/STL recognized the need for special precautions to promote objectively by R-W/STL in its technical decisions and to facilitate acceptance of such decisions by the participating contractors.

An unusual clause was inserted in the R-W/STL contracts prohibiting the development or production by R-W/STL of components for the ballistic missile program. However, as explained below, this clause may not have been fully effective in overcoming the natural reluctance of contractors to provide full cooperation in view of the substantial amount of work performed by R-W/STL in closely related fields.

Furthermore, as discussed below, information developed by participating contractors probably would be made available more freely to a Government staff than to a potential competitor in view of the possibility that such information may lead to valuable patents. If R-W/STL had been restricted from the outset of the ballistic missile program from obtaining title to patents in this program, the natural reluctance of contractors to make information freely available to a potential competitor might have been reduced. However, such a restriction, similar to the hardware ban preventing R-W/STL from fully capitalizing on the knowledge and competence it had obtained in the program, would remove an important incentive for its continued participation in the program. Many valuable inventions have been made by R-W/STL employees under the Air Force ballistic missile contracts, and title to these inventions is vested in R-W/STL.

Use of a Government staff to provide the systems engineering and technical direction of the program can reasonably be expected to avoid this deterrent to the full flow of information and simultaneously better assure the continued retention of the necessary capability.

**RESTRICTIONS PROHIBITING PRIVATE CONTRACTOR FROM DEVELOPING OR PRODUCING COMPONENTS IN PROGRAMS UNDER ITS TECHNICAL DIRECTION MAY NOT OVERCOME NATURAL RELUCTANCE OF PARTICIPATING CONTRACTORS IN VIEW OF POTENTIAL COMPETITION IN RELATED FIELDS AND FUTURE PROGRAMS**

In recognition of the need for special precautions in order to promote a greater degree of objectivity on the part of the technical director in advising the Air Force on technical matters which may naturally affect other industrial contractors, and to facilitate acceptance of technical decisions by the contractors working in the program, an unusual clause was placed in the R-W/STL contracts. This clause, contained in the initial definitive contract, AF 18(600)-1190, read as follows:

"The contractor agrees that due to its unique position in the administration and supervision of the program contemplated hereunder, the Ramo-Wooldridge Corp. will not engage in the physical development, or production of any components for use in the ICBM's contemplated herein, except with the express approval of the Assistant Secretary of the Air Force (Materiel) or his authorized representative."

Similar restrictions appear in subsequent contracts.

While as a result of this prohibition direct competition between R-W/STL and the contractors in the ballistic missile program was generally precluded, R-W engaged in substantial amounts of design, development, production, and servicing of end items in closely related fields, and the Air Force Inspector General has reported that "a number of contractors expressed resentment and criticism of the fact that R-W had been placed in a favored position to compete with older established companies."

**R-W/STL AWARDED SUBSTANTIAL AMOUNT OF CONTRACT WORK FOR DESIGN, DEVELOPMENT, PRODUCTION, AND SERVICING OF END ITEMS IN FIELDS CLOSELY RELATED TO THE BALLISTIC MISSILE PROGRAM**

Contracts and subcontracts awarded by the Air Force, Army, Navy, and various contractors to R-W/STL from its inception through December 31, 1958, for the design, development, production, and servicing of end items, as distinguished from technical studies, amounted to approximately \$61.4 million, as shown below:

	<i>Amount in millions</i>
Prime contracts:	
Air Force.....	\$35.9
Army.....	.6
Navy.....	14.0
Subcontracts under Defense Department prime contractors.....	10.9

Total.....	61.4
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# GOVERNMENT PATENT POLICY

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HEARINGS  
BEFORE THE  
SUBCOMMITTEE ON  
PATENTS, TRADEMARKS, AND COPYRIGHTS  
OF THE  
COMMITTEE ON THE JUDICIARY  
UNITED STATES SENATE  
EIGHTY-NINTH CONGRESS  
FIRST SESSION  
PURSUANT TO S. RES. 48  
ON  
S. 789, S. 1809, S. 1899, and S. 2326

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PART 2

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JULY 6, 7; AUGUST 17 AND 19, 1965

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Printed for the use of the Committee on the Judiciary

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WASHINGTON : 1965

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For these reasons I believe that, almost without regard to the allocation of U.S. rights in contract-connected inventions, disposition of foreign rights should normally be left in the hands of private contractors. Necessary safeguards in terms of compulsory licensing in situations involving essential international interests of the U.S. Government could readily be provided for.

I believe that with revisions related to the above suggestions, S. 1809 would well serve the public interest of the United States. I endorse the balanced and flexible approach which S. 1809 represents and hope for its enactment into law.

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Sincerely yours,

FRANCIS K. McCUNE, *Vice President.*

HAZELTINE CORP.,  
Little Neck, N.Y., July 1, 1965.

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*Chairman, Subcommittee on Patents, Trademarks and Copyrights,  
U.S. Senate, Washington, D. C.*

DEAR SENATOR McCLELLAN: For years we have anxiously listened to the intense debates on Government patent policy which have culminated in S. 789 (Saltonstall), S. 1809 (McClellan), and S. 1899 (Long), now before your committee. We think it imperative that the issue be brought to an early conclusion in order that the harmful uncertainty in industry be ended.

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The history of our company is very much germane to the subject. Professor Hazeltine left Government service at the end of World War I with an idea on how to apply defense technology to the then-embryonic domestic radio receiver market. The company was formed around him and grew to its present size in the intervening years, during which it contributed extensively to the commercialization of domestic radio, monochrome, television, and, finally, color television. Out of this grew extensive contributions to defense electronics. Patents were an extremely important part of the business; it is quite probable that it never would have developed without them.

Despite what Senator Long is said to have testified, the patents, in practical effect, were the result of many millions of dollars of Hazeltine's own risk capital, not the Government's. Senator Long obviously does not have the facts. Of our present portfolio of about 500 U.S. patents, very few were the offshoot of work under Government contracts and only because our people were able to use our prior skills in the Government projects. Of the latter, none played any substan-

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Under the circumstances, we strongly urge the passage of your S. 1809. We would prefer to see it strengthened in certain areas to make more certain our unencumbered right to inventions, which are really the result of our own experience, know-how, and capital. We would be pleased to offer specific suggestions for amendment, should you so desire.

As to S. 1899, we think it fundamentally erroneous in philosophy and a serious danger to healthy development of inventions in the public and private interest.

Respectfully,

L. B. DODDS, *Vice President.*

INDUSTRIAL NUCLEONICS CORP.,  
Columbus, Ohio, July 16, 1965.

Subject: Senate bill 1809.

Senator McCLELLAN,  
*Chairman, Senate Judiciary Committee, Subcommittee on Patents, Trademarks, and Copyrights, Washington, D.C.*

DEAR SENATOR McCLELLAN: I regret that my schedule did not permit me to testify before your committee. I have, however, prepared a statement, in the appropriate number of copies, which I would like included as part of the record of the hearing on Senate bill 1809.

I would appreciate receiving a copy of the hearing testimony.

Sincerely,

HENRY R. CHOPE,  
*Executive Vice President.*

STATEMENT OF HENRY R. CHOPE, EXECUTIVE VICE PRESIDENT, INDUSTRIAL  
NUCLEONICS CORP., COLUMBUS, OHIO

On behalf of Industrial Nucleonics Corp. of Columbus, Ohio, I am pleased to have this opportunity to present this statement for consideration by the Senate Subcommittee on Patents, Trademarks, and Copyrights. This statement is submitted in connection with Senate bill 1809 (McClellan), proposing a uniform national policy with respect to inventions resulting from Government-funded research and development.

We believe that the establishment of a uniform Government patent policy is important and will have far-reaching effects on the American economy. We believe that a properly worded statement of legislative intent and policy is needed to implement and expand the President's memorandum on Government patent policy dated October 10, 1963, and that most of the provisions of S. 1809 are appropriately directed to protection of the public interest without stifling free enterprise. I am therefore making this statement on behalf of Industrial Nucleonics Corp. in general support of the McClellan bill.

Our company is perhaps unique in making use of a new family of materials developed entirely at Government expense—namely, artificial radioisotopes developed and sold by the Atomic Energy Commission for use in commercial electronic measurement and control systems developed almost entirely at private expense by American industry. We hope that a brief history of the development and products of our company, and a brief statement of some of our recent specific problems in seeking to help Government agencies take advantage of our experience and know-how without compromising our background rights in inventions and technical data, may provide a case history helpful to this subcommittee.

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Our company was formed only 15 years ago in Columbus, Ohio, by three young engineering-science graduates—of which I was one—with very little capital or prior business experience. By dint of hard work, good fortune, and some private financial backing, our company has very recently grown out of the "small business" category. We presently have approximately 600 employees of whom over one-fourth hold engineering or scientific college degrees.



# GOVERNMENT PATENT POLICY

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## HEARINGS

BEFORE THE

## SUBCOMMITTEE ON

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## PATENTS, TRADEMARKS, AND COPYRIGHTS

OF THE

## COMMITTEE ON THE JUDICIARY

## UNITED STATES SENATE

## EIGHTY-NINTH CONGRESS

## FIRST SESSION

PURSUANT TO S. RES. 48

ON

S. 789, S. 1809, S. 1899, and S. 2326

## PART 2

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