corporations will include: (a) The incentive to invest in greater U.S. plant capacity. (The patentee will now have a patent-based advantage over foreign competition.) (b) The generation of royalties paid from foreign companies on products imported under license.

The off-shore final assembly of exported components into a patented combination is a question of basic fairness. To permit continued avoidance of infringement liability is to reduce the basic patent incentive on a mere technicality.

The slight change to the foreign filing licenses will in no way affect national security. It will, however, protect U.S. patent owners from uncertainty regarding their patent applications on a highly technical problem. U.S. patent owners should be encouraged to file counterpart foreign patent applications. Such filings avoid the dedication of technology to foreign interests and provide the basis for royalty payments back to the U.S.

U.S. patentees do not wish to change the basic patent law on questions of novelty, utility, and nonobviousness. They recognize that important patented industrial innovation may have to withstand attacks on these traditional areas of scrutiny. It is unfair, however, to have patents invalidated on highly technical points such as: (1) Did every named inventor make a contribution to every claim in the patent? (2) Has every bit of private secret work by every person who worked on a corporate or university team been considered in filing the patent application?

Procedural improvements in patent interferences will remove a technical problem in settling interferences and will permit arbitration. These will encourage settlement of disputes, judicial economy, and will provide a reasonable means to improve the efficiency of the Patent and Trademark Office.

The licensing agreements treatment should encourage the flow of technology by providing a more equitable treatment of patentees as well as licensees in disputes over patents. It will also relieve the courts of dealing with some of the problems involved in patent license disputes.

Senator MATHIAS. Mr. Schlicher.

STATEMENT OF JOHN W. SCHLICHER

Mr. SCHLICHER. Mr. Chairman, thank you for the opportunity to testify before you on these important bills. I support both S. 1535 and S. 1841. I support the concepts behind most of the provisions of S. 1535, except section 7, although I believe that many of the provisions could be improved.

Senator MATHIAS. That is why we are here.

Mr. SCHLICHER. However, I believe that titles III and IV of S. 1841 constitute the most economically significant and perhaps controversial aspects of the bills. I have addressed my testimony to those sections. I believe that S. 1841, if enacted, would increase the incentives for innovation without any loss in competition from activities properly prohibited by the antitrust laws.

This bill does not involve a tradeoff of the benefits of free competition associated with antitrust principles to achieve the benefits of invention and innovation associated with patent and copyright laws. The bill involves a situation George Shultz described in his book as a trade-on, a change in law or policy which permits one to achieve more in one area without giving up anything in another.

The possibility of a trade-on arises because the patent, copyright, and antitrust laws have a common purpose, to provide certain different conditions for the country's scarce resources to be used in the most productive way. Because those laws are designed to solve different problems, applying antitrust law to licensing patents and copyrights does not require a choice which sacrifices some of the benefits of one set of laws to achieve the benefits of the other.

The opportunity for Congress to make this trade-on arises because the courts have improperly defined the relationship between those two bodies of law. With one exception, Congress has never spoken on the relationship between the patent and copyright laws and the antitrust and misuse laws. During the congressional silence, the courts have consistently narrowed the means by which patent and copyrights may be profitably exploited. The Supreme Court did not create those rules based on experience. The law developed from judicial theory. For example, the Supreme Court finds misuse based on licensing a patent on the condition that the licensee buy unpatented supplies, because all such agreements are deemed to provide a limited monopoly outside the scope of a patent. They are illegal without any consideration of whether the patent owner was attempting to achieve, had achieved or had any prospect of achieving market power in the market for supplies and without considering whether the agreements provide any procompetitive benefits, such as increasing the percentage of the value of the invention paid to the patent owner, increasing use of the invention and reducing transaction costs of licensing. Those purposes are not anticompetitive. They are procompetitive. There are no reported cases I am aware of that show that anyone has ever acquired a monopoly outside the scope of a patent or copyright by this device.

The courts conclusively presumed certain types of agreements to be economically harmful without any consideration of this potential for actually economic harm, their economic benefits or any balancing of benefits against harm. In doing so, those rules serve neither the purpose of the patent and copyright laws nor the purpose of the antitrust laws.

The current laws affect virtually every license agreement involving technology developed or used in the United States. By correcting that error, the bill will increase incentives for innovation without resource allocation loses from decreased competition.

The current law makes licensing less profitable than use by the owner in making and selling products because the patent owner as producer may lawfully do many of the things contributing to efficient use of the invention which a licensing patent owner may not compel his licensee to do under the misuse rules. Hence innovators which are not fully integrated companies with capacity to produce and sell products, such as research companies, startup companies and individual inventors are at competitive disadvantage to fully integrated companies. Such persons and companies have less incentive to innovate than established manufacturing companies. In addition, many of the rules that apply to patents do not apply to trade secrets or to leasing personal property. Hence these rules create undesirable incentives to avoid the patent system and to avoid patent licensing in favor of licensing and leasing other things, even though that would be less profitable in the absence of these rules. Both of those consequences ultimately reduce incentives to innovate and reduce long-run competition.

This bill simply directs the courts to evaluate restrictions on technology use based on consideration of their potential for actual economic harm, their possible economic benefits, and, if necessary, a balancing of those benefits against harms in the market setting of the agreement. In addition, it compels the courts to apply the same considerations in ruling on patent misuse as it does in ruling with respect to antitrust violations.

It should, in my view, be enacted. Thank you.

[The following statement was received for the record.]

Prepared Statement of John W. Schlicher

The Economic Problem Underlying Patent and Copyright Laws

The Constitution recognizes that, in the absence of patent and copyright laws, there will be too little progress in science and useful technology.[1] Inventions and writings are intangible information, not physical goods. There are two problems which, if unremedied, will cause too few resources will be allocated to the production of information. The problem of externalities exists whenever the production of a good provides benefits to persons other than those with whom the producer has some pre-production agreement to be paid for those benefits. This is appropriately called the "free-rider" problem. Indivisibilities exist when the nature of a product requires that, in order to satisfy the demand of one user or consumer, the producer must make one unit of the product which is also capable of satisfying the demands of many other users or consumers. Such products are sometimes referred to as "public goods".

In the absence of patent and copyright laws, the market for information will exhibit external benefits and indivisibilities. Use of technical information in making goods may require disclosure to users and, hence, some users may have access to it and benefit from it without being required to pay. The same is true for the writings of authors. The cost of producing inventions and works are also all fixed costs. Once produced, intangible knowledge or information can be transmitted and used or reproduced without any additional resources being expended. The average cost of production for all uses always exceeds the marginal cost of use, which may be zero. Once produced, no single price for all uses can both ration the existing supply of information (a price equal to marginal cost) and provide adequate incentives for producers to make them (a price at least equal to average cost). Rather than inventors and authors being natural monopolists, they are natural failures.

Free, unrestricted competition in use of inventions and works will not yield proper resource allocation. The patent and copyright laws are designed to solve these economic problems by granting to the producers of an invention the temporary rights to exclude others from making, using or selling products embodying it[2] and to producers of works of authorship the temporary rights to exclude others from reproducing or distributing copies of the work.[3] Those rights permit their owner to prevent external benefits and charge a price for use greater than marginal cost. Patent and copyright laws merely give to the producers of intangible information the right to exclude, which property law gives to the owner of physical property. A patent or copyright does not necessarily permit its owner to obtain an economic monopoly of any product. Products using a patented or copyrighted invention or work must compete with all products using past inventions or works. The value of any particular patent or copyright will depend upon the value of the invention or writing it protects in view of all alternative inventions and writings available. That value will be determined by the market for inventions and works in which the rights to exclude are used or transferred by sale or license to others.

The Economic Problem Underlying the Antitrust Laws

Antitrust laws are necessary to provide some different conditions for markets properly to allocate resources. Agreements between actual or potential competitors to limit their competition will prevent markets from achieving this goal. The function of markets depends upon competition among suppliers of products in that market. Elimination of that competition by agreements having no offsetting benefits cause too few resources to be allocated to those markets. The antitrust laws also seek to prevent firms from improperly acquiring or maintaining monopoly power in a market. Unjustified monopolies also interfere with resource allocation by causing too few resources to be allocated to the markets in which those monopolies exist.

Patent And Copyright Laws Do Not Conflict With The Purpose Of Antitrust Law

The granting of patents and copyrights does not result in the resource allocation losses which are caused by unjustified monopolies and anti-competitive agreements. Patents are granted only for processes and products which are new and nonobvious in the sense that they differ technically from those which were used or known before the invention.[4] A patent or copyright does not preclude use of any pre-existing technology.

Assume that an old product is produced under perfectly competitive conditions. Because of the possibility of patenting, a new product is invented and patented, which is superior to the old product. Since the new product is subject to a patent, its seller may exclude competition from using it. For some users of the old product, the new product is more valuable to them, even if priced based upon maximizing by a single seller. Those old product users switch to new product. Competitors may continue to sell the old product, but will sell less. No resource allocation loss is involved because the consumers who switch are better off or they would not have done so and those who do not switch are no worse off. The portion of the demand for the new product not supplied, because of lack of competition due to the patent, is not a resource allocation loss, as in the case of an unjustified monopoly or an anti-competitive agreements. The new product did not exist and could not have been supplied without the invention. It is necessary to incur that "loss" to induce the invention of the new product, which improved the welfare of the consumers. Indeed, competition has increased. Without the patent, and the invention it prompted, there would be no new product market to be concerned about. Resource allocation has been improved.

The patent grant and its "monopoly" of use of the invention is consistent with the purposes of the antitrust laws. Antitrust laws do not require that all inventions be freely available for use by all competitors. The country is not better off by creating rules which take away the incentives to create new products. The benefits from new products and processes are enormous. Agreements which maximize the patent owner's returns from use of the invention yield an important long run, pro-competitive benefit.

Two possible costs of patents and copyrights are not economically necessary. The first is that patent licenses may provide a cover for horizontal agreements between actual or potential competitors not to compete in products made without using the patent Such agreements give rise to limits on competition unrelated to vertical exploitation of the invention. S. 1841 will not affect the law with respect to such horizontal agreements. The second is that, in theory, patent owners may make vertical agreements with users of the patented invention which permit the patent owner to acquire a monopoly not granted by the patent and exploit that monopoly to restrict output in markets for products made independently of the patent.

S. 1841 Provides An Economically Sound Test For Judging The Legality Of License Agreements

This second possibility is the basis for virtually all the patent misuse and antitrust law to which the bill relates. The Courts have determined that certain agreements always have this result and are always misuse or antitrust violations. The bill would change that law by requiring that, before reaching such a conclusion, the Courts consider the actual effects of such provisions in the market in which the agreements were made. That standard would require the Court consider both any anti-competitive potential and any pro-competitive benefits from the restriction. Moreover, it would provide that the standard for determining legality for antitrust purposes is the same standard that is used to determine patent misuse.

The relationship between a patent owner and its licensees is a vertical relationship. The patent owner is the supplier of an invention, one of many resources needed by the licensees to produce a product. Restrictions in vertical agreements may benefit competition. Restrictions on licensees may permit the patent owner to charge for its use based upon the different values of the invention to different users or in different uses. They may be devices to compel efficient use by the licensee. They may be devices to give licensees incentives to make investments, which permit more efficient use of the invention. Such restrictions may increase use of an invention. Restrictions serving those functions benefit competition by increasing the returns to the patent owner from use of the invention, and increasing the incentive to make inventions. The bill would require that those benefits be balanced against any anti-competitive restraints not necessarily resulting from granting the patent, before finding an antitrust violation or patent misuse.

The Current Law Makes Exploitation Of A Patent Or Copyright By Licensing Less Profitable Than Use In The Owner's Business To Make And Sell Products

The antitrust and patent misuse doctrines have operated primarily by prohibiting patent owners from exploiting their inventions by permitting others to make and sell the patented products. Such agreements are vital. Such agreements are necessary to permit the invention to be used in the most efficient way. License agreements are merely transactions by which the supplier of one necessary product provides it to another at a price which leaves both parties better off and the country better off by permitting resources to be used by those, who have the most valuable use for them. Because misuse law prohibits certain provisions of vertical license agreements, which compel the licensee to engage in certain conduct which is entirely lawful if done by the patent owner, the law makes use by a patent owner more profitable than use by licensing. This places innovative individuals and companies which can not exploit their inventions by producing and selling products at a distinct competitive disadvantage to those that can.

Some Of The Current Patent Misuse, And, In Some Cases, Antitrust Prohibitions Which Would And Should Be Tested By The Standard Of S. 1841

The Relation Of The Royalty Base To The Patent

In 1969, the Supreme Court held that a license agreement constituted patent misuse, where the patent owner conditioned the grant of the license upon payment of royalties on products which do not use the teachings of the patent.[5] The Court said such provisions were devices by which a patent owner could obtain a monopoly on the unpatented products, which monopoly could then be exploited injuring resource allocation in the market for the unpatented product. Assume the highest royalty rate for a license, where royalties are based only on patented products. If the patent owner requests a royalty base, which includes both patented new and unpatented old products, the licensee will not agree to pay royalties for both at that rate. That would require payments greater than what the patent is worth. At a lower royalty based on all products, the quantity of unpatented old products sold by licensees may decrease due to the royalty. If there are other unlicensed suppliers of the unpatented old product, this device is unlikely to restrict total output of the unpatented product. Output of the patented new product under this arrangement will increase due to the lower royalty. It can not be said that the effect of the agreement is harmful, because any losses in output of the unpatented old product may be offset by increase in quantity of the patented product. The likelihood of a patent owner acquiring market power over the market that includes both patented and unpatented products depends upon the market share of the licensees for the patented and unpatented products and the ease of entry into sale of the unpatented product. At prices above the level cost plus the lower royalty rate, the agreement has no effect on competition in sales of the unpatented product.

Moreover, this device may have the effect of improving increasing use of the new product by reducing transaction costs. The value of a patent is incapable of exact determination. The scope of a patent is frequently unclear and changes over time and differs from country to country. The costs of keeping records and making reports on products defined by patent claims may be significant. One method of reducing those costs is to make the royalty base independent of the scope of the patent. In that way, the parties can predict with greater certainty in advance the extent of the royalty obligations involved and reduce the administrative costs of the agreement. The Court seems to recognize that this royalty base serves those legitimate functions, although it is only legally operative in situations in which the history of negotiations shows that the licensee recognizes and, presumably, shares in that benefit by not asking for a limited base.

This rule has not been applied to licensing other intellectual property. There is no rule that requires that licensors of trade secrets collect royalties based only on use of those trade secrets. Accordingly, this rigid patent law rule creates undesirable incentives for licensors of technology to license secret know-how or lease personal property rather than license patents, since they may then agree to a royalty base which reduces uncertainties and costs.

I am confident that it is virtually never a patent owner's purpose to achieve a monopoly on an unpatented product by requiring licensees to pay royalties on it. If that were profitable, the way to put licensees at the maximum competitive disadvantage with respect to unpatented products is to charge a zero royalty on sales of the patented product and the maximum negotiable rate for the unpatented product. That is not what the agreement before the Supreme Court in 1969 provided and I am aware of no reported case which remotely suggests it has ever been done. Rather, the purpose of such a rate base is to reduce transaction costs.

The Relation Of Royalty Payments To The Patent Term

Prior to 1964, there was no limit on the term for royalty payments under a patent license. In 1964, the Supreme Court, with Justice Harlan dissenting, held that, when a patentee sold a patented hop picking machine and granted a license to use the machine, which called for royalties based on use before and after expiration of the last patent "incorporated into the machine," the patentee can not enforce the license to the extent that it called for post-expiration royalties.[6] While most lower Courts have recognized that this decision did not find the patent was unenforceable for patent misuse, a few Courts have found that post-expiration royalties constitute misuse.[7] The Court refused to enforce that part of the agreement because it was a device by which the patent owner could extend his monopoly to encompass the time after expiration and exploit that monopoly to limit production.

The value of the patent to the licensee is limited by the differences between the cost and demand during the patent's term. After the term, all others will be able to use the invention freely in competition with those licensees and the license provides them with no additional benefits. Hence, in order for the licensee to agree to pay over the longer term, the rate must be lower. Under that lower rate, output during the term will expand and output after the term may or may not decrease. The agreement does not prevent other companies from entering or companies selling unpatented competitive products from continuing to sell in the post-expiration period. The use of the long royalty term does not permit the patent owner to collect royalties equal to that he could obtain if the term of the patent were, for example, twenty-five years. The market power arising from the invention can only be exploited once. Even if competition is limited and output is restricted in the post-expiration period, there is an offsetting benefit in that competition has been greater and output has been greater during the patent term.

The lengthened term may also have benefits which increase use of the invention. Spreading those royalties over a longer period of time is a device by which the patent owner assists in financing the cost of his licensees adopting the new product.

A company which may itself produce and sell both the patented new and unpatented old products may charge for them any price above cost he desires. If he reduces the price of the patented new product to a price below the maximum he could charge during the patent term and tries to increase it in the post-expiration period, he may do so. A company which must exploit the patent by licensing may not, and the same undesirable results follow. The result of the decision is to treat manufacturing patent owners more favorably than non-manufacturing patent owners. Again, if it were really profitable to forego royalties during the term to obtain a monopoly after the term, the way to do that is to load all royalties into the post-expiration period. That is not what the patent owner who was before the Supreme Court in 1964 was doing and there is no reported case of such agreement.

"Discriminatory" Royalties

In the 1960's, the lower Courts found that a Gulf Coast shrimp canning company, which owned shrimp peeling patents, violated the antitrust laws and misused the patents by licensing West Coast shrimp canners, in effect, at a higher per pound royalty rate than it charged Gulf Coast canners.[8] Shortly thereafter, one Court reasoned that the refusal to license is the ultimate in discrimination and found that a refusal to license for personal rather than business reasons constituted misuse.[9]

The ability to license each user based upon the value of the patent to that user always permits the patent owner to earn higher revenue and in many instances will lead to greater use of the invention than a single royalty rate. The hop picking machine patent owner did it by licensing each user based upon the amount of hops picked. The Supreme Court in 1964 did not note any impropriety in that even though farmers who produced more hops pay a higher royalty per machine than farmers who produced fewer hops. Patent owners commonly and lawfully license different licensees in different fields for the precise purpose of charging royalties proportional to the different values of the invention in its different uses. The legality of those restrictions have been unanimously upheld.[10]

A policy which would seek to eliminate charging royalties proportionate to the value of the invention to different licensees would dramatically limit the value of patents to patent owners and the use of patented inventions. The prohibition against royalty discrimination somehow assum[es] that there is some resource allocation loss, whenever competing licensees are charged different royalty rates. In fact, it is never in the patent owner's interest to charge identically situated licensees different rates in order to eliminate the competition between them. If that were a patent owner's goal, it would be achieved far more efficiently by declining to license the disfavored licensee, as is its right.

Tying Arrangements And The Creation Of The Misuse Doctrine

Early in this century, the owner of a patent on mimeograph machines sold machines under a license with the restriction that it may be used only with paper and ink made by the patent owner. In 1912, the Supreme Court held that the sale of ink suitable for use in the machine in certain circumstances was contributory infringement and would be enjoined.[11] In 1917, the Supreme Court reversed itself in the

Motion Picture Patents.[12] It held that, where a patent owner licensed another who made and sold motion picture projectors having a patented film feeding part and put a notice on the projector that the purchase gives only the right to use it with unpatented films leased from the patent owner, the restriction was unenforceable. That decision was extended in 1938, when the Court held that an agreement in a license of a patented process that the licensee purchase an unpatented material for use in the process is unenforceable.[13]

In 1942, the Court held that agreements of this type rendered a patent entirely unenforceable, even against a direct infringer.[14] In that case, Morton Salt, a patent owner leased a patented salt dispensing machine to canners under a license to use it only with the patent owner's salt tablets. In an action against a maker of infringing machines, the Court held that the patent was unenforceable, even though the infringer, as a machine seller, was not harmed by the misuse and even though there was no evidence establishing any injury to competition sufficient to establish a violation of the antitrust laws. At about the same time, similar developments were taking place in antitrust cases.[15]

These rules arise out of the Court's conclusion that such agreements have the purpose and effect of giving the patent owner a monopoly beyond the scope the patent granted and, therefore, undesirably restrict competition in unpatented products. The fact that such agreements require a licensee to buy some unpatented product does not necessarily mean that competition in that product is restricted or, that if it is, there are not pro-competitive benefits which justify the restriction. The Court in Morton Salt found the patent totally unenforceable, whether or not competition in the salt market was actually suppressed. There was absolutely no discussion as to whether the Morton Salt Company acquired or was even attempting to acquire any salt monopoly (even a "limited monopoly"), that the amount of salt sold was restricted or that the price of salt increased by virtue of this agreement. The agreement to buy salt may simply have had the purpose of permitting the patent owner to collect, in the least costly way, royalties from different users of the invention proportional to the different values of the invention to them.

The potential benefits for resource allocations of tying arrangements can be illustrated considering variations of the facts in the first of these cases, Motion Picture Patents, involving projectors and films. The patent owner could make the new projectors, set up its own theaters, make its own films for showing in those theaters, and go into the theater business. That would raise no grounds for any antitrust violation or misuse defense, even though he would be obtaining some share of the market for films. The patent owner might elect to make and sell projectors. A single price for projectors may not maximize profits. The value of the improved projector to each user may be different. The patent owner might sell the projectors and individually negotiate licenses with each customer with a royalty based on the value and intensity of use of each licensee. To the extent that the value of the projector depends merely on the number of times it is used, the patent owner might attach a meter to the projector, and sell or lease it at a price dependent upon the metered use. Neither of those alternatives would raise antitrust or misuse problems. However, the costs of doing so may render those possibilities unprofitable.

The patent owner might seek to accomplish the same goals by selling the projectors with a license to use them only with films from the patent owner. The patent owner would make or buy films at market prices and supply them at above market prices. Theaters which use more films or use them more frequently, and therefore use the projector more intensively, would, in effect, be paying a higher royalty rate. His ability to charge a higher price for films does not reflect any market power in the general market for films. It reflects only the fact that a patent owner has not charged as high a price as he could have for projectors and rather collects its royalty based on film supplies. Depending on circumstances of the film market, the patent owner may or may not have by this device obtained any market power in the film market. Moreover, to the extent that it does, the benefit from increased returns for use of the invention and increased use of the invention during the term of the patent may justify any restriction on supply of films.

There are other reasons why projector patent owners might wish to supply films having nothing to do with acquiring a film monopoly. If films are supplied by a non-competitive market, the patent owner may wish to reduce the price of films, increasing the demand for projectors and the value of the invention. Another purpose, other than acquiring a film monopoly, is to encourage the licensee to use both projectors and film in the most efficient proportions. Another possible reason is to assure the quality that the films supplied are technically compatible with the projector. In addition, owners of process patents and combination patents are frequently in a position of being unable to directly exploit the invention. They may sell a product used in a patented method or combination to reduce the transaction costs of licensing users individually, while achieving some of the benefits of charging licensees based on the intensity of the use of the method or combination. Reducing those transaction costs benefits the patent owner and the country.

The adverse impact of the Morton Salt test on the value of patents is demonstrated in its companion case, B.B. Chemical Co..[16] There, the patent owner sought to prove that, unless it was permitted to exploit its patent by granting implied licenses to purchasers of a product used with the patented process, there was no other feasible way for it to obtain any income from the use of its invention. The Supreme Court said that the impossibility of exploiting the patent in any other manner was "without significance."

Another important consequence of the Morton Salt decision was that it made clear that no antitrust violation had to be established in order to establish patent misuse. The Court did not say what the lesser standard was, except that tying agreements always constitute misuse. That decision spawned the current body of law which flatly prohibits types of agreements without any evidence of their effects in the market and without any evidence of any pro-competitive benefits from them. There is no basis for applying those separate standards. In practice, the misuse doctrine, with its lesser standard, prevents use of any agreement which meets that misuse standard. No patent owner will enter an agreement, which renders the patent unenforceable against infringement. The bill would require that a single standard be applied.

Licensing More Than One Patent Or Copyright In A Single Agreement

In the late 1940's, the Court stated that a copyright or patent owner which refused to license its copyrights or patents other than as a package violated the Sherman Act.[17] The Courts have frequently found that a patent owner who conditions the grant of a license under one patent on the licensee's acceptance of a license under other patents had misused the patents.[18]

The law with respect to tying arrangements does not compel this result. The alleged harm of tying arrangements, namely, that patent owners acquire a monopoly over products not within the scope of the patent, is obviously inapplicable. The patent owner already has a monopoly in the supply of licenses under the other patents. A tying arrangement can give him no further market power with respect to their supply. There are reasons a patent owner or copyright owner would seek to license as a package other than to restrict competition. Where patents relate to the same use, it is impossible to negotiate a separate royalty on a patent by patent basis, because the royalty for any one patent depends upon the royalty for another. In addition, different licensees may place different values on the separate patents. By placing a single value on the package, the patent owner achieves to some degree the ability to charge different licensees at rates which reflect those different values. Such a license may reduce negotiation and enforcement costs. No licensee will pay more than the patents as a group are worth to him, and no licensee will use inventions, which are not profitable to use.

Those practices may or may not increase the use of the inventions or the copyrighted works. However, it is certain that this device does not extend the scope of any patent or copyright. Rather, it is a profit-maximizing device. The bill would require rule of reason analysis of such agreements.

<u>Restrictions Against The Licensee Dealing In Competitive Products</u>

In the 1940's, two Courts found that a license agreement in which the licensee agrees to refrain from dealing in competitive products constituted patent misuse, whether or not the agreement was likely to have any adverse effects on competition.[19] The Courts gave the same reason for creating that rigid rule. Such restrictions extend the patent monopoly to unpatented products.

Such agreements may have resource allocation benefits. A licensee's agreement not to deal in competitive products may avoid the free rider problem which arises when the licensee's investment has external benefits for products sold in competition with the patented product. The restriction may induce the licensees to invest greater amounts of money in further development and marketing of the patented product. Such investments will increase the output of the patented product by avoiding undesirable externalities in such investments, increasing competition from patented product suppliers. This is the same benefit which arises from granting exclusive licenses, which has always been found lawful. If the patent owner insists upon its licensees agreeing not to sell a competitive product, they will agree only if the royalty rate is reduced to compensate them for the losses to them from not marketing that product. The reduced royalty rate, which will be charged to induce the licensees to forego those, presumably, more profitably alternative products, will lead to increased output of and competition from the patented product.

The effects of the limitation on competition in the unpatented competitive product are unclear. The limitation on competition between the patented product and the unpatented product will depend upon what percent of the former suppliers of the unpatented products became licensees. If fewer than all such suppliers are licensed, competition between the licensees and the remaining sellers of the unpatented product may not be diminished.

The Court's assumption that such an agreement is always the method by which the patent owner acquires a broader monopoly, which it can exploit, is simply wrong. The unnecessary prohibition of such agreements again make exploitation of the patent by making and selling products more profitable than exploiting the same invention by licensing.

Field Of Use Restrictions On Process Patents

Historically, the Courts in approving field of use restrictions have not distinguished between restrictions on the sale of a patented product from those on sale of unpatented products made by patented processes. However, in one recent case, the owner of a patent on a process for making an old but very valuable chemical catalyst granted to one United States licensee an exclusive license to make and sell the unpatented catalyst using the process and granted licenses to other companies limited to making and using such catalysts in their own manufacturing operations. After one Court failed to find that these agreements constituted patent misuse,[20] another Court held that they violated the Sherman Act.[21] A Court of Appeals reversed that finding, but on the narrow grounds that the purported exclusive license to sell the unpatented catalyst made by the patented process was lawful, where the process was the only economically viable one.[22] Whether or not such a restriction would constitute patent misuse is a matter of some question.[23]

FOOTNOTES

1. U.S. Constitution, Article I, Section 8.
2. 35 U.S.C. § 154, 271 (1976).
3. 17 U.S.C. § 106 (1976).

4. 35 U.S.C. §§ 102 and 103 (1976).

5. *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100 (1969).

6. *Brulotte v. Thys Co.*, 379 U.S. 29 (1964).

7. *E.g.*, *cf.* *Rocform Corp. v. Acitelli-Standard Concrete Wall, Inc.*, 367 F.2d 678 (6th Cir. 1966).

8. *LaPeyre v. FTC*, 366 F.2d 117 (5th Cir. 1966), *aff'g in part & setting aside in part sub nom.* *Grand Caillou Packing Co. Inc.*, Trade Reg. Rep. (CCH), FTC Complaints & Orders § 16,927 (FTC 1964); *Peelers Co. v. Wendt*, 260 F. Supp. 193 (W.D. Wash. 1966); *Laitram Corp. v. King Crab, Inc.*, 244 F. Supp. 9, *modified*, 245 F. Supp. 1019 (D. Alaska 1965).

9. *Allied Research Prods., Inc. v. Heatbath Corp.*, 300 F. Supp. 656, 657 (N.D. Ill. 1969).

10. *E.g.*, *General Talking Pictures Corp. v. Western Electric Co.*, 304 U.S. 175 (1938), *aff'd on rehearing*, 305 U.S. 124 (1938).

11. *Henry v. A.B. Dick Co.*, 224 U.S. 1, 25-36 (1912).

12. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917).

13. *Leitch Mfg. Co. v. Barber Co.*, 302 U.S. 458, 460-463 (1938).

14. *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488 (1942).

15. *International Business Machines Corp. v. United States*, 298 U.S. 131 (1936); *International Salt Co. v. United States*, 332 U.S. 392 (1947).

16. *B.B. Chem. Corp. v. Ellis*, 314 U.S. 495, 496-497 (1942).

17. *United States v. Paramount Pictures*, 334 U.S. 131, 156-59 (1948).

18. *Hazeltine Research, Inc. v. Zenith Radio Corp.*, 388 F.2d 25, 33-35 (7th Cir. 1967), *rev'd in part on other grounds*, 395 U.S. 100 (1969).

19. *McCullough v. Kammerer Corp.*, 166 F.2d 759 (9th Cir.), *cert. denied*, 335 U.S. 813 (1948) (misuse); *National Lockwaster Co. v. George K. Garrett Co.*, 137 F.2d 255 (3rd Cir. 1943) (misuse).

20. *Ethyl Corp. v. Hercules Power Co.*, 232 F. Supp. 453 (D. Del. 1964).

21. *United States v. Studiengesellschaft Kohle, M.B.H.*, 426 F. Supp. 143 (D. D.C. 1976).

22. *United States v. Studiengesellschaft Kohle, M.B.H.*, 670 F.2d 1122 (D.C. Cir. 1981).

23. *cf.* *Robintech, Inc. v. Chemidus Wavin, Ltd.*, 628 F.2d 142, 146-49 (D.C. Cir. 1980).

Senator MATHIAS. You have commented in your statement to some extent on the question that I asked Mr. Banner at the outset, whether or not the slowdown in the growth of technology in the United States or at least the relative slowdown as compared with what is happening in the rest of the world is in some measure related to flaws in the patent system, and you would think that that is true I gather from what you just said.

I wonder, Mr. Witte, Mr. Maurer, do you agree?

Mr. WITTE. Yes, sir, I agree. I also think that these changes are necessary to turn it around, to speed up innovation, and turn their problem around.

Mr. MAURER. Certainly we would agree with that. I think that what we are trying to do here is, as I said, adapt the system to today's climate of business and to improve the reliability of the system because of its importance to research-oriented companies.

Senator MATHIAS. Now, as we have discussed in the course of the morning, some of these proposals have been around for awhile, and the reason that they have not been adopted into law is that somebody was less than enthusiastic about them.

One of the fears may be, and Mr. Schlicher again touched on this in his statement, that they will reduce competition in some way, that they will adversely affect the interest of the consumer.

Could you comment on that?

Mr. MAURER. I believe he was addressing his comments to S. 1841, is that correct, Mr. Schlicher?

Mr. SCHLICHER. That is correct.

Mr. MAURER. Not to S. 1535, which I do not believe would have that effect.

Senator MATHIAS. Well, I wanted to ask you very directly because you represent a major manufacturing company what you thought the effect of this on the consumer would be, because I think the record should reflect that at some point.

Mr. MAURER. Well, I think looking at it on a long term basis, I guess I happen to believe, and I do not know that I should speak for all members of the Ad Hoc Committee on that point, but I believe that, to the extent that we can insure that the patent system performs the function that it is intended to perform and, therefore, increase ultimately the productive capacity of the United States that the consumer will benefit in the long run from those improvements.

Senator MATHIAS. In other words, if there is a continued decline in innovation, the consumer will suffer.

Mr. MAURER. Ultimately, yes. I believe that very firmly. And I think we look at it from the standpoint also of our role in the competitive world that we live in. To the extent that we cannot be sure that the United States remains competitive, the consumer will suffer in the long run because of the competition from foreign countries and people in foreign countries, the jobs that we would lose as a result of that.

Senator MATHIAS. What answer would you give if objection is made to these bills that the patent system is already sufficiently generous to industry and that industry has ill rewarded that generosity by moving considerable production offshore in the search for cheaper labor or less onerous regulation? I'm sure we will hear that argument?

Mr. SCHLICHER. Senator, if I may make one comment first. When one looks back to the Scott amendments, which were the only previous legislative proposal to deal with the problem that S. 1841 deals with, and that was controversial, I think you will find that those amendments did not contain provisions even remotely comparable to titles III and IV. With respect to the question of whether U.S. industries are somehow obligated to produce in the United States because we have a good patent system, when, in fact, it may be more profitable for them to produce offshore because of cheaper labor rates and tax rates—a primary reason lots of that is done—I think it is a point which goes, perhaps, to changing policies which keep labor rates higher, and keep taxes higher, keep safety and health regulations costly, another reason for going overseas.

Senator MATHIAS. Those are not strictly patent considerations.

Mr. SCHLICHER. That is correct.

Senator MATHIAS. But then there is no rule of germaneness in debating in the U.S. Senate.

Mr. SCHLICHER. I think it is not the purpose of the patent laws to provide all of the conditions for companies to be able to produce efficiently and competitively in the world markets. It is related to one specific economic problem that free market economies have, and it attempts to address that problem.

Mr. MAURER. I think as far as S. 1535 is concerned, obviously many of the amendments are more remedial in a sense to improve, but let us take a look at the process patent one. It seems to me that that has the effect that I believe we should be looking for, and that is to encourage manufacture in the United States by, in effect, not allowing competition to exist using U.S. technology in an offshore location.

I think that is exactly one of the reasons why the process amendment is important, that it will promote industry in the United States.

Senator MATHIAS. And will reduce the incentives for going offshore.

Mr. MAURER. Absolutely.

Mr. WITTE. Not only that, Mr. Chairman, I think, in addition to that, the other parts of this remedial legislation will attempt to strengthen and retain technology in this country, whether it is the foreign filing licensing or the secret prior use or even *Lear* v. *Adkins*, that which strengthens the patent system will tend to keep the technology at home and can increase it.

Senator MATHIAS. Now, both of your companies must do a considerable international business. How is this going to play in the international markets? Will you feel strengthened by this in terms of foreign operations, generally in your international representation?

Mr. WITTE. For my own company, we do business abroad competing with one another, but the benefit comes back to the home company, the royalties, the increased worldwide business, the export of materials.

Senator MATHIAS. And your international operations, you think, will be strengthened?

Mr. WITTE. Oh, yes, but the strength of the home company will be increased also.

Mr. MAURER. I would support what Mr. Witte says. I think that to the extent that it has an effect on our international operations, my first judgment is, it is a little indefinite. I think the point is that it will strengthen the U.S. operation, and that is where the emphasis ought to be.

To the extent that there may be some fallout in terms of the international area, I think that is a very secondary consideration. What we are trying to do is strengthen the parent company, which is the U.S. company.

Senator MATHIAS. I suppose I should be more specific. Would you anticipate any retaliatory steps by any of the trading nations with which your company trades?

Mr. MAURER. At first blush I would say no because, for example, you take the process amendments. That is the kind of law that exists in the major manufacturing countries throughout the world. We are the exception, not the rule, so that that situation already exists in terms of our competing in other countries.

So we are only becoming equal, I think, from that standpoint. That is certainly one which will have more effect from an international standpoint than I believe the other ones.

The other thing I had not mentioned is you take the *Lear* v. *Adkins* decision. The concept of licensees being able to attack validity was a proposition that first grew out of the U.S. law and has been, to a certain extent, adopted by other countries to maybe not the same degree but it has certainly crept into Europe.

Hopefully we might be able to temper that situation from getting worse from the international standpoint.

Mr. SCHLICHER. Mr. Chairman, I would second the notion. It seems abundantly clear to me that in passing S. 1841 and S. 1535 there would not be a remote possibility of any retaliation by any other Western European or Japanese country, mainly because, as was pointed out with respect to the process infringement question, those countries already have those laws. With respect to misuse laws and the *Lear* v. *Adkins* doctrine, our major trading partners to this date do not have laws as restrictive of their domestic industries as our laws are of our industries. Indeed, the European Economic Community has been struggling for over 10 years to try to write a code which incorporates American misuse law and they have now done it. If Congress were to indicate that the sense of policy in the United States was that there should be revisions in that area, I think it is almost certain they would follow us, and I think with respect to the *Lear* v. *Adkins* question that a similar result would be expected.

Senator MATHIAS. Thank you very much, gentlemen.

Our final witness for today is Mr. Alfred B. Engelberg, chief patent counsel of the Generic Pharmaceutical Industry Association.