

Effects of Restrictive Clauses

An evaluation of effects of certain restrictive clauses and a suggestion for a flexible approach to deciding legality

By **KENNETH E. PAYNE***

Presently, the United States finds itself in an economic morass characterized by, *inter alia*, more inflation than economic growth, and declining productivity. This situation is partly attributable to a fixation on policies based on Keynesian economic theory, which policies emphasize stimulation of consumer and business demand while placing too little emphasis on the production, or supply, of goods and services. Moreover, expansion of R&D, which could assist in future productivity growth, has slackened, partly as a result of decreasing incentives.

Throughout the developed and the developing world, many cry for specific rules of legality and illegality to control technology transfer. Competition rules are suggested which itemize specific illegal acts. This type of thinking has permeated the antitrust patent interface in the United States for years. It exists now in Mexico, Brazil, Andean Pact and other developing countries. It is a major part of the Code of Conduct and is rapidly becoming the mode of thinking within the EEC.

The purpose of this paper is not to exhaustively analyze the state of law regarding restrictions in licensing. Rather, in view of the aforementioned domestic economic problems and the call for specific rules of legality and illegality, this paper seeks to reevaluate the competitive effects of particular restrictive license clauses and to suggest a more flexible approach for determining legality of these clauses.

ANTITRUST, PATENTS, LICENSING, AND COMPETITION FRAMEWORK FOR ANALYSIS

The foundation of the U.S. antitrust laws is to promote competition based on efficiency, i.e., to provide consumers with goods at the lowest price that efficient business operation can justify, and to allow business to compete on the basis of its own merit.¹ While the antitrust laws primarily focus on enhancing price competition for preexisting products, the patent and other technology related laws primarily focus on enhancing competition by providing alternatives to preexisting products.²

The patent law pursues its objective by providing incentives for the invention and commercialization of new and better products.³ Moreover, the disclo-

* *Partner, Finnegan, Henderson, Farabow, Garret & Dunner, Washington, D.C.*

sure required in issued patents tends to spark others to improve on original ideas, thus further promoting product differentiation.

However, the promotion of invention, by itself, does not enhance competition. Absent commercialization of the invention, there can be no effect on competition. The transfer of technology performs a critical role of enhancing the utilization of inventions. Through transfer, the quantity of goods produced is increased, geographic markets are expanded and the fields in which an invention can be applied are increased.

Aside from enhancing invention utilization, which in itself promotes competition, technology transfer has a direct effect on competition by increasing the number of competitors in a given market. Even where price competition in the licensed product between a licensor and his licensees may be limited, competition by product differentiation is still increased, particularly where the transferee would not have entered the market but for the transfer. Moreover, the new-entrant will likely be in existence, competing with the transferor, long after rights in transferred technology expire.

Rigid Rules

In the early and mid-1970s, U.S. Justice Department officials attempted to establish rigid rules for determining the legality of various restrictive clauses. Such pronouncements included the following: (1) it is "unlawful for a patentee to require a licensee to adhere to any specified or minimum price with respect to the licensee's sale of the licensed products", or (2) "it is clear that it is unlawful to require a licensee to purchase unpatented materials from the licensor," or (3) it is "unlawful for a patentee to require a licensee to assign to the patentee any patent which may be issued to the licensee after the licensing arrangement is executed."⁴ The U.S. Justice Department listed nine "no-no's" or illegal acts related to technology transfer. These same illegal acts are included in the Code of Conduct being advocated by the Group of 77 and in various national laws.

Whether these extra-judicial statements of illegality by U.S. Justice Department officials seriously eroded technology transfer in the United States is conjectural. Yet such rules, if followed, would clearly limit the flexibility of parties to transfer technology and thus potentially reduce the number of transfers. Significantly, these rules were followed by many in the United States and not surprisingly, since they were often expressed by government officials in a threatening manner. Perhaps, the most

amazing aspect of such rules is that they seem to have developed and grown to acceptance without analytical study.

Since the aforementioned rules were constructed without a careful analytical foundation, it is not surprising that the Justice Department may be reconsidering its prior dogma. In a speech by Ky Ewing, Jr. Deputy Assistant Attorney General of the antitrust division, he commented upon the nine no-no's as follows:

While they are signals of possible concern, I do not view the nine no-no's in their entirety as black-letter law. If they have a fault it is that they have suggested to some—quite inaccurately—that the Antitrust Division's approach to the interface of patent and antitrust law is wooden, doctrinaire and perhaps even simplistic.⁵

The prior approach taken by the Justice Department was, indeed, "simplistic". More importantly, it was harmful.

Absent a callous disregard for the effects on competition, black-letter rules of law should not be used in determining the legality of restrictive clauses. While restrictive clauses may have certain surface effects on competition, they may also provide motivation for innovation and licensing. *Per se* concepts of illegality totally ignore this latter effect.⁶

Restrictive clauses, no doubt, do have certain anticompetitive aspects. This, however, is not dispositive of either their legality or their effect on competition. As stated by Mr. Justice Brandeis:

(T)he legality of an agreement or regulation cannot be determined by so simple a test as whether it restrains competition. Every agreement concerning trade, even regulation of trade, restrains. To bind, to restrain, is of their very essence.⁷

In order to determine whether a restrictive clause is one that promotes competition or one that suppresses competition,⁸ which is the true test for legality under Section 1 of the Sherman Act,⁹ it is necessary to consider the justification or purpose for using the restriction, as well as its effect on competition. In considering the effect on competition of a restrictive clause, one must look at the entire environment¹⁰ in which the restriction is used including the relevant market in which the licensed invention is but a part, the market positions of the licensor and his competitors, the market positions of the licensees and their competitors, and the effect on transfer and innovation if the restriction were proscribed.

The following sections of this paper, while not intended to be an exhaustive analysis of restrictive clauses, reviews the anti- and pro-competitive aspects of various restrictive clauses. A complete competitive analysis of the laws governing research and development and technology commercialization is sorely needed today.

PRICE RESTRICTIVE CLAUSE

It is generally believed that clauses which restrict or control the price at which a licensee can sell a product made by use of licensed technology are virtually *per se* illegal and are little used today in the United States. Yet many refuse to transfer for fear of establishing a competitor who will drive

down prices and reduce profits.

The leading cases which upheld horizontal limitations on the first sale prices of manufacturing licensees is *United States v. General Electric*.¹¹ G.E. owned patents covering the manufacture of tungsten filament electric light bulbs. It also had 69% of the electric light bulb market, while its licensee, Westinghouse, had 16%. In its license agreement, Westinghouse was obligated to follow prices set by General Electric. In upholding the price clause, the court stated:

Conveying less than title to the patent or part of it, the patentee may grant a license to make, use and vend articles under the specifications of his patent for any royalty or upon any condition the performance of which is reasonably within the reward which the patentee by the grant of the patent is entitled to secure.....When the patentee licenses another to make and vend and retains the right to continue to make and vend on his own account, the price at which his licensee will sell will necessarily affect the price at which he can sell his own patented goods. It would seem entirely reasonable that he should say to the licensee, "Yes, you may make and sell articles under my patent but not so as to destroy the profit that I wish to obtain by making them and selling them myself."¹²

The economic rationale underlying *General Electric* is that a patentee is unlikely to license a competitor who is free to undersell him. The General Electric case is a classic example of a basic patent¹³ being held by a dominant firm. Had General Electric not licensed Westinghouse, it is conceivable that Westinghouse would have been unable to compete. The deletion of Westinghouse as a competitor would have deprived the public of alternative sources of supply and would have removed the possibility of competition in regard to factors other than price, i.e., maintenance, services, warranty, etc. Moreover, by being able to remain in the market, Westinghouse provided competition for General Electric after expiration of the basic patents.

Since *General Electric* was decided in 1926, it has been severely narrowed to the point where it is virtually *per se* illegal for a licensor to restrict or control the price at which a licensee can sell a product made by use of the licensed technology.

In *United States v. Line Material Co.*,¹⁴ Southern had a dominant patent covering dropout fuse devices, while Line had a subservient patent. Since utilization of both patents was needed for a commercially acceptable product, Line and Southern cross-licensed each other and agreed to maintain certain minimum prices. In addition, sublicenses with price maintenance clauses were granted to others in the industry. In striking down this arrangement, the court stated:

While the General Electric case holds that a patentee may, under certain conditions, lawfully control the price the licensee of his several patents may charge for the patented device, no case of this Court has construed the patent and antimonopoly statutes to permit separate owners of separate patents by cross-licenses or other arrangements to fix the prices to be charged by them and their licensees for their respective products.¹⁵

The problem with a rigid rule of law that a price maintenance clause is illegal if cross-licensing is involved is that it may well proscribe conduct which, under certain situations, may be pro-

competitive. Assume, for example, that two competitors with a marginal share of the market cross-licensed each other in order to manufacture a commercially acceptable product. Assume, also, unlike the situation in *Line Material*, that the other, more dominant members of the industry, were not sub-licensed but were, instead, marketing a viable substitute product. In this situation, a price maintenance clause limited in time may enable the product covered by the patents to establish a market position vis-a-vis the substitute products. During the period where the price clause is in effect, price competition with the substitute product would still be possible. Consumers would benefit in the long run since there would be an increase in the number of viable competitors, as well as in the number of available products in the relevant market.

Limited Further

The use of price restrictive clauses has been further limited where the licensor issues more than one license. In *United States v. United States Gypsum Co.*,¹⁶ United States Gypsum, which was the dominant concern in the gypsum industry, licensed all its competitors east of the Rocky Mountains under its patent for closed-edge gypsum board. The licensees agreed not to sell at prices lower than that set by United States Gypsum. There was evidence in the Gypsum case that the licensing arrangement was being used as a vehicle to fix prices in the entire industry, with all parties tacitly agreeing to cease production of an unpatented open-edge board. In finding a violation of the Sherman Act, the Court stated:

Even in the absence of the specific abuses in this case, which fall within the traditional prohibitions of the Sherman Act, it would be sufficient to show that the defendants, constituting all former competitors in an entire industry, had acted in concert to restrain commerce in an entire industry under patent licenses in order to organize the industry and stabilize prices.¹⁷

In the second Gypsum¹⁸ case, the court did not reach the issue as to whether a mere plurality of licenses, each containing a price-fixing provision, violated the Sherman Act. However, at least one lower court has held that the mere issuance of a plurality of licenses, each containing a minimum price clause, violates the Sherman Act.¹⁹

Attempts to fix prices in an entire industry and restrain production of substitute products, such as in the Gypsum case, should be proscribed. However, one should not blindly prohibit all price clauses whenever a licensor issues more than one license. Conduct is not pro-competitive or anti-competitive merely because one, two or x number of licenses are issued. There is a quantum gap between *Gypsum* and a situation where a small manufacturer of a patented product, dwarfed by competitors whose substitute products dominate the market, issues several licenses with limited duration price clauses. In the latter situation, the public is benefited by having an increased supply of the patented product, as well as vigorous competition between the patented product and available substitutes.

The apparent demise of the *General Electric doc-*

trine, which recognized that a patentee is unlikely to license a competitor who is free to undersell him, has created a barrier to patent licensing and the concomitant dissemination and diffusion of technology.

Minimum Price

The imposition of a minimum price at which a patented product can be sold may limit price competition between a licensor and his licensees as well as among licensees. However, such a restriction may also be used to enhance the reward of the licensor and thereby the incentive to develop, commercialize and transfer technology. Such a restriction may also permit others to enter a particular market and, after the restriction terminates, provide price competition that otherwise would not have existed. Whether society is harmed or benefited from such a restriction can only be determined on an individual basis. Such a cost-benefit analysis must balance the effects achieved by such a restriction in promoting technology commercialization and transfer against the possibility of unduly high and unjustified prices caused by a lack of price competition below a restricted price level.

One potential benefit of a price restrictive clause is to provide an increased return or reward to the developer of the technology, thus enhancing the incentive to invent. Whether a price restriction actually enhances the reward of the licensor is in part dependent on the royalty structure of the license. Obviously, a percentage royalty based on net sales price will diminish as the sales price is reduced. Thus, it may be to the benefit of a licensor to insure that the sales price does not drop below a given level. In contrast, royalties based on a fixed price per unit sold usually do not vary with the sales price unless the license provided for some form of graduated royalty relative to the number of units sold.

The nature of the market may also control the degree of enhancement of the licensor's reward achievable by a price restrictive clause. For instance, lower prices may enhance competition with substitute products. As a result of such lower prices, the number of units sold may be increased which can increase royalties irrespective of the technique used to calculate royalties. Significantly, however, blood-thirsty price competition may not be the best way to build market acceptance and compete with substitute products. A given level of profit may be necessary to advertise, improve the product, increase services, etc. These latter factors suggest the possibility of justifying a price maintenance provision for a limited period of time, i.e. to permit introduction of the product and development of a market.

Another potential benefit of permitting price restriction clauses is that the licensor may, with the protection of such clauses, be willing to grant licenses or a greater number of licenses. If royalty is based on the number of patented items sold irrespective of price and the licensor is not in competition with his licensees, it may be to the licensor's advantage to encourage price competition among

his licensees since this could result in a greater number of units sold. However, if royalties are based on a percentage of the gross or net sales price, the inability to set minimum prices may lead the licensor to limit the number of licensees to avoid excessive price competition which might lower total royalty revenues even where increased sales are achieved.

Where the licensor competes in a market with potential licensees, he may be very reluctant to license anyone for fear that his own market position would deteriorate as a result of price competition. This is especially true where the licensor competes with larger and, perhaps, more efficient firms. While a licensor, in some cases, may be able to equalize the competitive advantage of his licensees by imposing a sufficient royalty cost, this may not always be possible.²⁰

To the extent that technology transfer is enhanced by the use of price restrictive clauses, the consumer will be provided with an increased number of supply sources. These sources may be totally free to compete in matters other than price to the clear benefit of the consumer. Moreover, price competition will, and should, ultimately commence after a period of time. At this point, the consumer may benefit from increased competition that would not otherwise have existed but for the price restrictive clause. Thus, long-term price competition is fostered at the cost of permitting a short-term restriction on price competition.

A distinction is often drawn between the effects of price restrictive clauses on manufacturing or competing licensors and non-manufacturing or non-competing licensors. Yet, it is questioned that any general distinction can accurately be defined. In either case, reward may be enhanced since, where royalties are based on net or gross sale price, each has a valid desire in maintaining those prices above a given level. Either type of licensor may also be justified in limiting the number of licensees to prevent excessive price cutting, thus eliminating the degree of transfer.

The development and transfer of socially desirable technology, such as alternate sources of energy, may be enhanced by restrictions on the prices that a licensee may charge. In a given situation, the benefits to society attainable through the availability of such technology may far exceed any detriment caused by a decrease in price competition. Price competition and its maintenance should not be a sole criterion for legality.

EXCLUSIVE LICENSE OR ASSIGNMENT GRANT BACK

Grant-back provisions require the transferee of technology to grant to the transferor, in whole or in part, rights to technology developed by the transferee. The grant back can be in the form of an assignment, exclusive license, or nonexclusive license. It may be royalty free or require a payment from the transferor to the transferee.

The leading case involving grant backs is *Transparent-Wrap Machine Corp. v. Stokes & Smith Co.*²¹ In this case, Transparent-Wrap granted to

Stokes an exclusive license to make and sell "Transwrap" machines. The license agreement included a covenant by Stokes to assign to Transparent-Wrap "improvement patents applicable to the machine and suitable for use in connection with it."²² Stokes would be permitted to use any such improvement patents without the payment of additional royalties. In holding that the specific grant-back clause before it was not *per se* illegal or unenforceable, the court commented on the argument that the grant-back clause was a disincentive to invention:

There is a suggestion that the enforcement of the condition gives the licensee less incentive to make inventions when he is bound to turn over to the licensor the products of his inventive genius. Since the primary aim of the patent laws is to promote the progress of science and the useful arts (*United States v. Masonite Corp. supra* (316 US p 278, L ed 1475, 62 S Ct 1070) and cases cited), an arrangement which diminishes the incentive is said to be against the public interest. Whatever force that argument might have in other situations, it is not persuasive here. Respondent pays no additional royalty on any improvement patents which are used. By reason of the agreement any improvement patent can be put to immediate use and exploited for the account of the licensee. And that benefit continues so long as the agreement is renewed. The agreement thus serves a function of supplying a market for the improvement patents. Whether that opportunity to exploit the improvement patents would be increased but for the agreement depends on vicissitudes of business too conjectural on this record to appraise.²³

However, the court suggested that in different situations a specific grant-back clause could give rise to an antitrust violation:

We are quite aware of the possibilities of abuse in the practice of licensing a patent on condition that the licensee assign all improvement patents to the licensor. Conceivably, the device could be employed with the purpose or effect of violating the antitrust laws. He who acquires two patents acquires a double monopoly. As patents are added to patents a whole industry may be regimented. The owner of a basic patent might thus perpetuate his control over an industry long after the basic patent expired. Competitors might be eliminated and maintained. Through the use of patent pools or multiple licensing agreements the fruits of invention of an entire industry might be systematically funneled into the hands of the original patentee. (Footnote omitted).²⁴

In a fairly recent case, *Duplan Corp. v. Deering Milliken, Inc.*,²⁵ the court concluded that the assignment grant back in question did not violate the antitrust laws since the grant-back provision (1) had no adverse effect on competition, (2) permitted the licensee to use the improvement inventions it developed without the payment of additional royalties, and (3) did not discourage inventive activity on the part of the licensee. The court did, however, find patent misuse inasmuch as the grant-back clause covered inventions which extended far beyond the scope of the licensor's patents.

Notwithstanding *Transparent-Wrap*, the Department of Justice has, in the past, included assignment grant backs in its infamous list of "nine no-no's," and has considered such grant backs *per se* illegal.²⁶ However, more recently, the department has indicated that in certain situations it would not object to an exclusive grant back. It gave the

following example as the type of exclusive grant back it would not object to:

(An) obligation to grant back an exclusive license or an improvement patent during the term of an original patent, where the improvement patent could not be used alone without infringing on the original patent, is unlikely to change the state of competition substantially during any period the original patent remains valid and in force.²⁷

Grant-back clauses serve a legitimate interest of the licensor. This fact was recognized by the court in *Santa Fe-Pomeroy, Inc. v. P & Z Company, Inc.*²⁸

Although grant-back clauses arguably can have the effect of stifling the incentive to invent, "(i)t is, in fact, not impossible for a licensee to make an improvement in the licensed invention that would commercially displace the latter in whole or in part and thereby impair the value of the original invention....(In relation to the licensee the licensor is entitled to some protection for its original investment in research and... a grant back is a reasonable device through which to seek such protection".²⁹

The interest of the licensor expressed in *Santa Fe-Pomeroy* is a real one. A licensee may develop improvements which could put the licensor in a competitive disadvantage or block him from future developmental work. Moreover, without exclusive access to the improvements, the licensee may extinguish the very competitive advantage afforded by his patent. For example, the licensee, receiving related know-how technology, may so improve and alter the licensor's invention that it no longer infringes the licensor's patent and commercially displaces the licensor's product.

Prudent

A prudent licensor, recognizing these dangers, may refrain from licensing unless he has some assurance that he can continue to control the limited market which he may have built. To the extent that licensing would be discouraged by broad prescriptions against exclusive grant backs, potential competition for the licensor would be reduced. Moreover, to the extent that many improvement inventions by licensees would not have occurred but for access to the licensor's technology, broad prescriptions against exclusive grant backs may have a dampening effect on the development of improvement inventions and, concomitantly, on the competition afforded by product substitution.

Exclusive grant back may have very significant procompetitive effects for smaller licensors who wish to license and also build a competitive position in a particular relevant market. The licensing of technology to a large enterprise with significant research and development capability may be the beginning of the end for the smaller licensor. A recognition of this fact will surely diminish the licensor's desire to license. Yet the smaller licensor may not be able to meet the need of the market and may thus be unable to supply consumer demand or compete with substitute products. If society is to gain the benefits of using the licensor's product and providing competition with a substitute product, the licensor must grant one or more licenses. But to achieve that desirable end for society he must relinquish some control over his product.

Obviously, the above situation makes numerous

assumptions regarding the nature of the technology and the ability and desire of the competition to design around the patent or other rights of the licensor. While the failure to grant a license might not hold off competitors indefinitely, it might delay their entry and increase their costs. Thus, an exclusive grant back for a designated period of time might be more easily justified in many situations.

There are numerous anti-competitive effects to exclusive grant backs. As recognized in *Santa Fe-Pomeroy*,³⁰ they can stifle the incentive of a licensee to engage in research and development. This anti-competitive effect is diminished where the licensee is granted (1) the right to use all developments, (2) the right to license such developments for uses outside the field of the licensor, and (3) some compensation for technology rights used by the licensor.

Exclusive grant backs can also serve as a means for accumulating portfolios of patent rights and thereby extending the exclusive right afforded by the initial grant of the patent. This effect is most pronounced where a licensor has a plurality of licensees and serves as a focal point to collect patent rights from these licensees. The grant back then becomes a mechanism for effecting a type of patent pool with the licensor in charge of the pool. This anti-competitive effect can be ameliorated by (1) limiting the technical scope of the grant backs, and (2) limiting the exclusivity of the licensor to a time no later than expiration of his initial or perhaps broadest patent.

Where the grant-back provision is limited in technical scope and time, and the licensee is permitted to use the improvements he develops and to license such improvement in fields other than the licensor's, the negative effects of such provisions can be minimized. By permitting such exclusive grant backs, licensing may be encouraged, the licensee may have an incentive for investing in R&D, and competition may be enhanced by increasing the number of competitors and the availability of substitute products.

TIE-INS

Tying occurs where one party, using some form of leverage in a first item, i.e. the tying item, forces the taking of a second item, i.e. the tied item, as a condition to obtaining the first. In technology transfer, tying could occur when (1) the transferor requires or coerces the transferee to take certain products or services (tied items) as a condition for receiving the desired technology or patent rights (tying item), or (2) the seller of the patent item (tying item) forces the buyer to purchase other items (tied items) to obtain the patented items.³¹

In *Northern Pacific Railway Co. v. United States*,³² the court commented upon the *per se* illegality of tying clauses:

They are unreasonable in and of themselves whenever a party has sufficient economic power with respect to the tying product to appreciably restrain free competition in the market for the tied product and a "not insubstantial" amount of interstate commerce is affected.³³

Where the tying product is patented, as was the case in *International Salt Co. v. United States*,³⁴ the danger exists that a court may presume economic power in the patented product.

The alleged evils of tie-ins were expressed by the Supreme Court:

They deny competitors free access to the market for the tied product, not because the party imposing the tying requirements has a better product or a lower price but because of his power or leverage in another market. At the same time buyers are forced to forego their free choice between competing products.³⁵

Notwithstanding the presence of a *per se* rule, the courts have, in limited situations, recognized certain beneficial uses of tie-ins. Where the tied product is essential to the successful operation of the tying or patented product, it may be permissible.³⁶ Similarly, where a business is new, a court may, for a limited period of time, permit the tie of a product and a corresponding service to insure preservation of goodwill.³⁷ Finally, where the tied product is a nonstaple with no noninfringing use, the courts have not applied a *per se* rule.³⁸

In situations other than those discussed above, the courts have applied a rigid *per se* rule to tie-ins. This is best described in a discussion of the *International Salt* case in *Northern Pacific Railway Co.*, *supra*:

In that case the defendant refused to lease its salt-dispensing machines unless the lessee also agreed to purchase all the salt it used in the machines from the defendant. It was established that the defendant had made about 900 leases under such conditions and that in the year in question it had sold about \$500,000 worth of salt for use in the leased machines. On that basis we affirmed unanimously a summary judgment finding the defendant guilty of violating Section 1 of the Sherman Act. The court ruled that it was "unreasonable, *per se*, to foreclose competitors from any substantial market" by tying arrangements. As we later analyzed the decision, "it was not established that equivalent machines were unobtainable, it was not indicated what proportion of the business of supplying such machines was controlled by the defendant, and it was deemed irrelevant that there was no evidence as to the actual effect of the tying clauses upon competition." (Citation omitted; emphasis added.)³⁹

It is submitted that the factors underscored above, among others, are very relevant in determining the pro- and anti-competitive effects of a particular technology transfer. The effect of a tying clause in suppressing competition in the tied product could, in particular circumstances, be far outweighed by the overall gain to society of making the transfer.

In *International Salt*, the International Salt Company was the country's largest producer of salt for industrial use.⁴⁰ Unlike the situation in *International Salt*, assume that a small business (SB) develops and patents a new process which utilizes component X. The new process has a significant cost advantage over all other processes. Company (M) has a dominant position in a preexisting market for component X. Because of the entrenched position of M and the barriers to entry, SB has been unable to break into the component X market. By permitting SB to require, at least for a limited period of time, that its licensees purchase com-

ponent X from it, SB would be able to get a "toehold" in the component X market. With time, SB may be able to establish itself as a significant competitor in the market for non-patent-related uses of component X, thus enhancing competition.

The alleged evils of tie-ins, previously discussed, are minimal in this hypothetical situation. The market for the patented-process use of component X is small relative to the total component X market, and SB's competitors would have free access to the non-patented use market. Moreover, while those who elect to use the patented process would be required to purchase component X from SB, it cannot be said that they are "forced" to purchase it from SB since they are free to use the available substitute processes for the patented process.

While, concededly, some short-term suppression of a segment of the component X market may exist if SB's new process is truly significant, this is far outweighed by the potential long-term enhancement of competition in the component X market, as well as increased innovation resulting from enhancement of incentives.

Another situation where the application of a *per se* rule may produce negative effects is where a licensee is unable to pay the royalty being charged by the licensor. If the licensor lowers the royalty, his most-favored licensee clauses will require him to lower royalties to all licensees, thus significantly diminishing his royalty return. The licensor has two realistic choices: refuse to license the licensee or extract some other form of compensation from the licensee. The second choice could be undertaken where the licensor sells a material or component used in practicing his technology. Is competition restrained if he requires that a single licensee buy his component in order to get a license at a lower royalty rate? Consider this fact pattern the licensee is in a developing country and the end product obtained by use of the technology would be the sole competition for imported products of a similar type. Does the situation produce an anti-competitive or a pro-competitive affect?

The use of *per se* rules of illegality provide a degree of certainty in the law and arguably afford a measure of judicial economy. Yet, in the area of technology innovation and transfer, the public sacrifice in lost technology opportunities will not justify whatever minor social gains might be achieved by certainty and judicial economy.

NOTES

1. U.S. Department of Justice, *Antitrust Guide for International Operations*, 2 (1977).

2. Enhancing product differentiation through innovation also enhances price competition in a given relevant market since there are more available substitutes for preexisting products.

3. Bowman, *Patent and Antitrust Law: A Legal and Economic Analysis*, 2 (1973). Invention is not inexpensive. Absent a reasonable expectation that R&D will generate profits, a rational businessman would not allocate resources to R&D.

4. See Morse, *Is Antitrust Really Anti-Patent?*, 55 *Chic. B. Rec.* 154 (1974).

5. Ewing Jr., *Is Antitrust Enforcement and The Patent Laws: "It Is As Craftsmen That We Get Our Satisfaction And Our Pay,"* PTCJ, No. 429 (May 17, 1979).

6. There appears to be no justification for *per se* rules. The assertion that they save judicial time is of questionable validity. See Harris, *A Centrist Program on Competition Derived from Patent-Antitrust Experience*, 47 *Geo. Wash. U. L. Rev.* 1, 11, n. 13 (1978). While they may provide some degree of certainty, this

is far outweighed by the harm produced.

7. *Chicago Board of Trade v. United States*, 246 U.S. 231, 238 (1918).

8. *National Society of Professional Engineers v. United States*, 435 U.S. 679, 691, (1978).

9. 15 U.S.C. Section 1.

10. In *Continental T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 49, (1977), the court indicated that: Under this rule, the fact-finder weighs all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint on competition.

11. 272 U.S. 476 (1926).

12. *Id.* at 489-90.

13. It is estimated that, during the 1920's, 97% of incandescent bulbs produced in the United States embodied General Electric's patents. See *United States v. General Electric Co.*, 15 F. 2d 715, 716 (N.D. Ohio 1925).

14. 333 U.S. 287 (1948).

15. *Id.* at 311.

16. 333 U.S. 364 (1948).

17. *Id.* at 401.

18. *United States v. United States Gypsum Co.*, 340 U.S. 76, 85 (1950).

19. *Newburgh Moire Co. v. Superior Moire Co.*, 237 F.2d 283, 293-94 (3d Cir. 1956).

20. Where the patentee is at a significant competitive disadvantage, it is unlikely that he could equalize the competitive advantage of his licensees solely by the use of royalty rates inasmuch as the royalty rates would be unattractive to any potential licensee.

21. 329 U.S. 637 (1947).

22. *Id.* at 639.

23. *Id.* at 646.

24. *Id.* at 646-47.

25. 444 F. Supp. 648 (D.S.C. 1977), *modified per curiam*, 594 F.2d 979 (4th Cir. 1979).

26. See note 4, *supra*. See also Remarks of Bruce Wilson, 5 CCH Trade Reg. Reporter Paragraph 50, 148.

27. Antitrust Guide, *supra* note 1 at 44.

28. 569 F.2d 1084 (9th Cir. 1978).

29. *Id.* at 1101, n. 34.

30. *Id.*

31. In addition, mandatory package licensing could be considered a form of tying.

32. 356 U.S. 1 (1958).

33. *Id.* at 6.

34. 332 U.S. 392 (1947).

35. *Northern Pacific Railway Co. v. United States*, *supra* note 32 at 6.

36. See *Dehydrating Process Co. v. A.O. Smith Corp.*, 292 F.2d 653 (1st Cir. 1961), *cert. denied*, 368 U.S. 931.

37. *United States v. Jerrold Electronics*, 187 F.Supp. 545 (E.D. Pa. 1960), *aff'd per curiam*, 365 U.S. 567 (1961).

38. See

Rohm and Haas Co. v. Dawson Chemical Co., 599 F.2d 685 (5th Cir. 1979), where the sale of propanil was tied to an implied license to use it according to the patented method. In many situations, the economics of the industry is such that the invention is not sold in the form in which it is claimed in the patent. To preclude a manufacturing patentee from selling the nonstaple product unless he licenses his competitors is a substantial disincentive to R&D in new applications for existing products. It is disingenuous, at best, to assert that the patentee is leveraging his patent "monopoly" into a market for an unpatented product since, absent the patentee's invention, there would be no market for the unpatented product.

39. 356 U.S. at 8-9.

40. 332 U.S. at 394.