

# Case Against Compulsory Licenses

*Antitrust and compulsory licenses, the "uncertainties" for invention and competitive R&D*

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The Congress shall have the power . . . To promote the progress of science and the useful arts . . .

An interesting idea is it not? One that could be implemented by government R&D contracts or by Congress' granting of money awards to inventors of merit.



T. Arnold

But this constitutional authorization of power is unique: Other powers of Congress may, by the Constitution, be implemented by any means "necessary and proper" to the power; but the means for implementing THIS power is specifically spelled out and limited thus:

... by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.<sup>2</sup>

No means for promoting the useful arts is recited or there authorized other than the "exclusive right" in the inventor. Thus government R&D contracts must be lawful, if at all, under some *other* power, like the war power, for such other means are not authorized under the promotion-of-the-useful-arts power.

Under this specific promotion-of-the-useful-arts power, limited as it is to the grant of "exclusive right" to the "inventors," our patent statute, Title 35, was enacted. Under it the Great Seal of the United States certifies every patent grant in the solemn, absolute and unconditional phrase:

Every patent shall . . . grant to the patentee . . . the right to exclude others from making, using or selling the invention throughout the United States . . .<sup>3</sup>

And 35 U.S.C. § 261 characterizes this right to exclude as a "property" right.

The idea of course, is this: In order to induce the private sector of society to take their perspiration and capital from relatively safe investments and put them into the high risk investment that is R&D, we must provide *on average* a high return on the high risk investment. On each individual invention society thinks it good policy to match the return at least roughly to the value of the invention's contribution to society's need or want, e.g. to society's use of the invention.

Both of these public interest goals are effectively accomplished by the patent which the Constitution characterizes in "exclusive right" language, and which the statute calls a "property" right "to exclude others from making using or selling the invention."<sup>4</sup>

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The next social question requires three phrases to present:

1. What all-or-part, if any, of this absolute exclusive right, may the patent owner waive by license or other contract in order to maximize the return on his investment, and hence maximize his inducement to commit more

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capital to competitive R&D and useful art progress?

2. With what selectivity of persons may the owner waive all or part of his absolute right to exclude?

3. What consideration may the owner ask in exchange for his waiving of all or part of his right to exclude others?

For about 150 years after establishment of the patent system in this country the answer to all these questions was essentially uniformly stated in favor of full freedom of the patent owner to exercise his untrammelled discretion to do what he wanted to do.

## Common Law

While we had adopted the Common Law of England including the Statute of Monopolies and had certain common law of antitrust in this country, for precisely a century after the patent system was set up in our country, there was no United States statutory consideration given to any alleged need for competition in products already existing in the channels of trade. There was no United States antitrust statute.

Then came the Sherman Act in 1890.<sup>5</sup>

It was not concerned with competitive generation of new things not yet in being, but with competitive selling of things already in being. As to such things already in being, Sherman Act §1 proscribes

(e)very contract . . . in restraint of trade

and section 2 proscribes

(e)very person who shall monopolize or attempt to monopolize . . . any part of the trade commerce . . .

That is pretty strong, unconditional language, with no exception carved out for patentees.

The unconditional language of the Sherman Act notwithstanding, for about half a century after this first enactment of pro-competition public policy in the Sherman Act, essentially every case involving the interface between the two concepts was resolved in favor of the patentee.<sup>6</sup> The Supreme Court in *GE* in 1926 fully recognized the practicalities involved in grant of a license:

One of the valuable elements of the exclusive right of a patentee is to acquire profit by the price at which the article is sold . . . 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 effect the price at which he (the patentee) can sell his own patented goods.<sup>7</sup>

That was the court's application of the general rule of reason stated by the court in language that a patent owner may grant a license on

any condition the performance of which is reasonably within the reward which the patentee by the grant of the patent is entitled to secure.<sup>8</sup>

The sale of an unpatented staple commodity of commerce was, in the 1931 Supreme Court decision of *Carbice Corp. v. American Patents Development Corp.*,<sup>9</sup> held to be outside the reasonable control of the patentee. But for 14 years after *GE*, i.e. until 1940, essentially no contract involving a patent owner's license or waiver of any part of his exclusive right, was held to be not reasonable in context of *GE*'s phrase: "the reward which the patentee . . . is entitled to secure."<sup>10</sup>

The law in 1940 seemed clear that the patent owner could:

1. Control the licensee's price of the goods that could not be made at all without the license.

2. Extend the license only in exchange for grant back or cross license of selected reciprocal patent rights of potential benefit to him.

3. Charge royalties as high as he could extract from the party who would rather pay than be excluded from use of the invention.

4. Charge royalties not only on the patented part of the entire marketed machine but on unpatented main frames and appendages — for example, on appendages which but for the patented addition might not be economically feasible to use at all.

5. Restrict the field of use of a licensee, i.e. one licensee might be licensed for apparatus adapted for the commercial motion picture market and another for apparatus adapted for the home movie market.<sup>11a</sup>

6. Restrict the territory of the use of the patented manufacturing process or equipment after lease of the apparatus to the user — for example, so as to keep for the patentee in his home territory a freight cost advantage over competition who but for the license would not serve any of the country at all with the invention.

7. Grant a license to one or two applicants but not to all applicants on the logic that the patentee's clear right to exclude all could not be rendered socially pernicious by his excluding some number less than all.

8. License five patents with different expiration dates at a single royalty until the last expiration date.

9. Grant a license to the first licensee (who perchance had high manufacturing costs or perhaps had entered at high capital risk where and when others feared to tread) at a lower royalty than that offered to a subsequent licensee who entered an already proven market with low costs to harvest the foam off of an onrushing market wave to which he made no contribution.

10. Pool his patents with others. *Standard Oil Co. (Ind.) et al v. United States*, 283 U.S. 163 (1931).

This list is but a few of the possible examples. Only tying of sales of unpatented goods to patents seemed clearly to be an illegal licensing practice.<sup>11b</sup>

These 10 restrictions in possible licenses often work to maximize the patentee's return on the true value of his invention while encouraging voluntary licensing — which affords a prompt public enjoyment of the new things and at least some degree of competitive use in commerce.

The return so obtained was seen prior to 1940 not to ex-

ceed the value of the inventor's contribution or of his right to exclude others since any restriction which was more burdensome than the nonuse of the invention would not be accepted by the licensee. Hence, all restrictions which industry accepts must be within the licensee-businessman's judgment of the value of having access to the invention which he desires to use.

No new statute affecting the social policy presently under discussion has been passed from that day of relative (perhaps only apparent) legal certainty, to this day of extreme uncertainty. But in the late 1930's President Franklin Roosevelt established his personal majority on the Supreme Court, including Justices Douglas and Black.

College economics textbook writers also commenced in the thirties if not before, to extol the alleged merit in what they called "perfect competition," namely a large number of suppliers, of substantially identical products, selling to a large number of buyers, with the sellers having no significant exclusivity of product features, brand name, or the like.

Every law graduate and judge for decades has been taught of alleged pure uncontaminated merit of this "perfect competition" and essentially none has been taught either the merit of the patent system of exclusives or the contaminating demerits that accompany the merits of "perfect competition."

Judges and lawyers are not taught the fact that in several commercial areas where we experience the most nearly "perfect competition," i.e. wheat, cotton, beef, milk, we find chronic low wage scales; low investor interest; no investment of private capital in R&D (to the extent there is any, it is subsidized by ag colleges or the Department of Agriculture); slow progress in the technology; and frequent, if not chronic, need for subsidy or price supports — which is not *all* good.

Meanwhile, in antitrust problem areas like image reproduction, we find that one company has an exclusive on instant photographs, another has an exclusive on cheap copies on regular paper, and another has an exclusive on the quality of the color in its pictures, etc. And in this market we find high wage scales, high investor interest, high investment of private capital in R&D, rapid progress in the technology, and never a suggestion of need for subsidy — which is not *all* bad.

### Simplistic Blindness

I am not so simplistic as to suggest that either economics or social policy can be evaluated or adopted solely on my example of some social merit in imperfect competition as compared to so-called perfect competition. I do suggest that those on the bench and in government, who are making public policy, often indulge in simplistic blindness as to some good lessons which can be derived from such examples.

Perfect price competition is a mixed bag of merit and mischief that deserves our studious attention, but it is false as a god. Those who distort all other benign public policies in blind worship of this false god do the public interest a disservice.

So with the advent of the personal philosophy of Mr. Justice Black and Douglas and friends, and the brainwashing of all educated people that perfect competition was a social goal of pure merit without any accompanying

mischief, we find in the early 1940's a sharp new revelation of licensing law.

The first important patent licensing case I have identified after the establishment of the Roosevelt court was brought by one Thurmond Arnold for the United States against Ethyl Gasoline Corp. In 1940 that case matured into *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436. The case is important in its revelation of the extent to which a party can in some situations regulate an entire industry by exercise of the right to exclude others from selling including reselling of an invention. Lawyers inexperienced in industry control use of a few pressure points should study the case as a vehicle for better understanding of what kind of patentee power generates antitrust fear among judges and Department of Justice antitrust enforcers.

The case also struck down as illegal, resale price maintenance by the patentee through the device of selective royalty free licensing of jobbers who were resellers on ground that the first sale exhausted the patentee's right, citing the 1917 *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502. In both cases the court gave the silent treatment to the patentee's statutory right to exclude sales, apparently including resales, and separately to exclude uses of his invention.

Tying of patent licenses to unpatented goods, condemned in 1917 in *Motion Pictures*, supra, and in 1931 in *Carbice*, supra, was condemned twice again in 1942, in *Morton Salt Co. v. G. S. Suppiger Co.*,<sup>12</sup> and *B. B. Chemical Co. v. Ellis*.<sup>13</sup>

Also in 1942 was *U.S. v. Masonite Corp.*<sup>14</sup> wherein the aforementioned Thurmond Arnold of the Antitrust Division obtained a judgment from the Roosevelt Court condemning a composite of field of use restrictions and controls of prices charged by the licensee, the court's focus being on price fixing.

Also in 1942 was *U.S. v. Univis Lens Co.*,<sup>15</sup> wherein Thurmond Arnold obtained yet another judgment from the Roosevelt Court that after the first sale of a patented article, the patentee could no longer control the use or price thereof. The Court said:

The first vending of any article manufactured under a patent puts the article beyond the reach of the monopoly which the patent confers.<sup>16</sup>

Because the statute spoke to the contrary, the licensing bar had been slow-to-unwilling to accept that concept and apply it to all licensing situations. Rather, it seems, the effort had been to distinguish the prior cases so holding.

Other cases wherein the law was revealed to be different from what the licensing lawyers had thought at time of licensing, continued to flow.

The statutory law had not changed, but the names of the participants in the litigation had changed. The new names were Douglas, Black and Thurmond Arnold. The government of laws revealed itself to be in a significant measure a government of men.

#### Closer Look

There are few of us who would not agree that some of the changes in the law, revealed and in part made since the early 1940's, have been socially desirable. But let us look for a moment at the results of *the process* by which the change has been made.

Not many years ago the patentee did feel certain that his

using any of a score of licensing devices in order to get the best overall deal in exchange for his waiving his right to exclude others not only from making but from use or sale of his invention as the statute said, was not only lawful but in the public interest. For if inventors on the average controlled the market for their inventions and got generous returns on their inventions, men would be thereby induced to commit more effort and capital into making inventions. This is the whole point of the constitutional purpose in authorizing Congress to grant patents.

Beginning circa 1940 a few of those licensing practices were revealed as *per se* illegal without any new legislative consideration; without any consideration being given to the effect upon the constitutional purpose, promotion of the useful arts.

But, the great majority of the licensing practices became merely uncertain which, in view of the fact that the penalty for guessing wrong is so heinous, is almost as bad as *per se* illegal.

A majority of the licensing devices, while still approved as lawful by the most recent applicable cases in at least some circuits, are declared in Department of Justice luncheon speeches to be either *per se* unlawful or potentially unlawful by a hindsight rule of reason exercised by hindsight critics years after the businessman had to make his move or see his asset waste away toward expiration.

And, the penalty — if the businessman guesses wrong — ranges from unenforceability of a perhaps multi-million dollar patent to treble damages. Even the penitentiary is held threateningly over the head of the businessman as encouragement against his including a limitation such as a price control arrangement in his license.

The last patent license price control clause before the Supreme Court was that involved in the 1965 case of *United States v. Huck Manufacturing Co.* In a setting which did not have a lot of sex appeal for the Department's position, the Supreme Court affirmed the patent license price control as lawful by a 4-4 divided court. Even so, we all know that unlawful price fixing can send businessmen to jail.

Considering the uncertainty of the law, the penalties of error in legal judgment are entirely disproportionate.

Let us now note another point. Patent licenses are commonly entered into for periods of 10 or 15 years. In this context it is naive not to recognize that case law — and that is *all* the law on licensing practices — is inherently and inevitably *ex post facto* law. The Supreme Court cases of the 40's arose out of licenses of the depression 30's when price competition was almost uniformly accepted as the curse of the times rather than the source of all things good.

#### Telegraph Punches

This *ex post facto* nature of court-made licensing law makes it highly benign that the Department of Justice lawyers travel the luncheon speech circuit and telegraph their punches to us as far in advance as possible so we can protect our clients from being the test case that costs a 10-million-dollar patent value. But, often we must give up a million-dollar value which the courts still say is the patent owner's right to have, in order to avoid being the extortionee of the Department of Justice or of some infringer seeking desperately to justify in law his plagiarism of the

investment and risk taken by another when he would not.

The uncertainty is thus seen to deter licenses that otherwise would be granted — at a sacrifice of the very competition the antitrust law was intended to foster. The uncertainty is thus seen also to reduce the return of the high risk investment that is R&D.

Insofar as the *uncertainty* reduces the size of the carrot by which the patent system induces the commitment of effort and money to R&D, it is an “uncentive” to invention. Moreover, insofar as the new antitrust law that either exists or is threatened reduces the size of the carrot, the new antitrust law is an uncentive to invention.<sup>17a</sup>

One Department of Justice luncheon speaker, Mr. Richard Stern, said that in patent licenses, “There are no safe harbors.” And, “There are no *per se* legalities.” There are only illegalities, questionable legalities, and legalities which the Department asserts the intent to change by making your license a test case, at least in some contexts of use. An act though legal in one context is likely to be illegal in another, not readily definable, context.

Finding this state of the law to be *per se* unreasonable by any rule of reason, a group of lawyers, most of whom knew both patent and antitrust law, undertook to draft some licensing legislation. The intent of this legislation was not to change the law. The intent was to record in statutory form as areas of *per se* legality, various licensing acts which stand as lawful under today’s law, and to record as subject to the traditional antitrust rule of reason, various licensing acts which today stand subject to such rule of reason.

Introduced by Senator Scott of Pennsylvania (who later turned his back on them) the legislation became known as “the Scott Amendments” to Sections 261 and 271 of S. 643, 92d Cong. 1st Sess. (1971) — the then current Patent Law Revision bill. The legislation was approved by every bar association in the country which took action on it. This included the American Bar Association and the American Patent Law Association, both of which have antitrust lawyers by the score and as many patent defendant’s attorneys as patent plaintiff’s attorneys in their number.

The effect of this proposed legislation would be to render most new licensing law no longer *ex post facto*. The effect of this legislation would be to give licensors some confidence that the law governing their licensing practices will remain the law until the licensed patent expires.

#### Decline to Approve

But Department of Justice antitrust lawyers, having some further *ex post facto* changes in the law already in mind, declined to approve the Scott amendments. Some were so self-sold on what they wanted the law to become, that they falsely alleged that the Scott amendments were making great changes in the existing law in favor of the patentee, when in fact they were an effort to hold the then present line that has been constantly moving against the patentee at least since 1940.

Assistant Attorney General Thomas Kauper testified at least at one recent time (either as his own or perhaps the then administration’s belief), that patent licensing law is better made case by case than by legislation. And his support of that view, expressed to the Senate Judiciary Committee, was probably *the* most important nail in the coffin

in which the late Scott Amendments lie now interred. It has been said among advocates for the Scott Amendments that Mr. Kauper’s testimony means inherently that he (or the administration for whom he spoke) favors *ex post facto* law making, at least when it is against patentees.

It has been said that (without ever having considered the ever deteriorating return on R&D investments in our nation, or the loss of progress in our useful arts<sup>18a</sup> which his action begets in a time when other nations are overtaking the United States in the technology race and when there is critical need for rapid advancement in the technologies of pollution control, energy generation, and the like), Mr. Kauper favors freewheeling further restriction on the patentee’s rights — and hence further restriction on private contribution to the advancement of the useful arts. This of course is unfair.

Xerox Corp. and xerography clearly would not yet be here for Mr. Kauper to worry about, but for the incentives of the patent system. Still, patents *are* a part of the ever-increasing concentration of our industries. The man charged with not only decreasing that increase, but reversing it, must have a set of priorities different from mine. Given his duty, his antitrust experience and his lack of experience in technology economics, his set of priorities seem to become so focused that he almost unknowingly accepts *ex post facto* making of licensing law, the deterrent to licensing that this entails, the loss of competition that the deterred licenses would generate, and the uncentive to invention that results from patent owners being uncertain in their view of what is lawful licensing practice.

Just as he does not to the satisfaction of the patent bar give adequate weight to those factors, it may also be said that the patent bar does not give adequate weight to the magnitude of the problem of restraining industrial development toward oligopoly and monopoly, and restoring more competition in industries which now suffer 85% dominance by very few companies.

#### Trade-offs

I suggest to all government antitrust policy makers it is not the patent bar’s interest which is at stake. It is not the inventor’s interest which is at stake. It is the capacity of private industry to serve the national interest with new technologies now so critically needed which is at stake. The trade-off is technological progress versus industry concentration. It is competition in the progress of new technologies versus competition in the marketing of products already on the market.

We have no need to worry about whether the price to the public is right for an antibiotic if that antibiotic has not been invented, safety tested, efficaciously tested and been made known to the medical profession.

As private industry has lost much of its capacity to serve the national need for new technologies, we have seen the government R&D contract stepped up and ever upward — contributing to inflation and contributing something less than 10% as much new applied technology per dollar as is obtained from the private R&D dollar.

The modern armies of antitrust philosophy have won essentially every battle with the constitutional theme for progressing the useful arts. This is partly because there is little hard data on the effect of licensing law upon R&D economics. This is partly because there is no Assistant At-

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torney General in charge of legal incentives to invent<sup>18b</sup> while there is one in charge of fighting restraint of trade irrespective of any debilitating effect on the incentive to invent. This is partly because the only advocates for the constitutional patent system appear to be servants of some big self-interest when they appear before Congress, even when they are in fact servants of the public interest in a viable system of inducement of needed new technologies.

This is partly because there are likely not 1,000 people in this nation, a pathetically small and ineffective lobby, who really understand R&D economics. And almost none is in a position of political or economic influence while

antitrust advocates ranging from Ralph Nader to Senator Hart have made for themselves positions of important influence.

It is not enough for us to say that patents are constitutionally endowed and antitrust is a Johnny-come-lately, and stomp off into the corner to pout about, or onto the golf course to forget about, the growing hurricane of antitrust philosophy. For this storm is washing away the goose house, the house of the geese who throughout our history have been laying golden eggs of new important inventions.

Not only the R&D community — which in significant part has its head in the sand as of now — but the trade regulation community, must be brought to a set of value-judgment priorities that assures a larger incentive for R&D.

A critically necessary party of that incentive must be a licensing law that licensors can trust; a licensing law that is something other than an invitation to the courthouse; a licensing law that encourages the businessman on the business firing line, to make his commitment to invent.

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To explain with a concrete example the social mischief in the form of R&D discouragement of antitrust policy, we could use field-of-use licenses or discriminatory royalties or any one among a dozen license practices. But having stated my general conclusions, I will proceed here to treat in depth only one small part of one of the many license-practice topics. The topic is compulsory licensing. The part is royalties.

Contrary to popular belief, we in the United States are up to our ears in compulsory license law.

The constitutional phrase "exclusive right" notwithstanding, in the last six years we have in this country seen the enactment of the Plant Variety Protection Act<sup>19</sup> which provides for *royalty free* compulsory licenses on new varieties of tomatoes and other soup vegetables, and for *royalty bearing* compulsory licenses on other sexually reproduced plants.<sup>20</sup>

We have also seen the enactment of the so-called Clean Air Act<sup>21</sup> with compulsory patent licensing provisions.

There are, I believe, five *de facto* compulsory patent license statutes now on our books.

The pending copyright law revision bill which has been passed by the Senate and will be reported out by the House subcommittee in July (1976), seems almost assured to bring into our law in 1977 new copyright compulsory licenses in no less than five distinct areas, perhaps more.

We saw in 1974 Congressional action wherein a tie vote saved us for a couple of years from compulsory licensing of much energy technology.

We have seen the experience rating — the law in action — of the new section 41 of the Canadian patent law<sup>22</sup> providing for compulsory licensing of pharmaceuticals and foods.

In the courts, compulsory licensing is a popular remedy for both fictional and real antitrust violations. Further:

We have seen in 1974 the establishment in the Second Circuit of the concept of compulsory license by reason of failure to work the invention.<sup>23</sup> The court there took a step which Congress has considered many times but has never enacted.

In cases such as *Activated Sludge*,<sup>28</sup> involving Milwaukee's sewage disposal into Lake Michigan, it is clear that the court was ruling in favor of the governmental entity, compelled by an eminent domain philosophy.

At the time of court judgment the infringing sewage plant was built and operating. There was no competitive opportunity for an alternative system. To enjoin its use would force the city to dump raw sewage into Lake Michigan. And the city could afford a royalty rate by *any* measure of reason. The royalty arrived at must inevitably have been not related to price competition or cheap access, but to compensation for the governmental taking of property a' la eminent domain theory.

But R&D is a high-risk investment.

Dozens to hundreds of blind alleys must be assiduously explored in the lab for every invention that turns out a winner in the marketplace. Research produces no cream without incurring also the cost of producing the milk. (For purposes of my metaphor I am assuming milk to be not worth its cost.)

Some inventions are the one time flash of genius conception of a man with no R&D expense, but these are rare. As Edison said, "Invention is 99 percent perspiration and only one percent inspiration." Perspiration of researchers whose children must have milk and shoes paid for with capital while the researcher perspires.

Thus, on industry-wide average — to which the patent system must address its attention — the few winners (the cream) must make enough money to support not only the cost of their own development but also the development of all the many losers, the milk. Otherwise no company can remain in R&D business, with the many losses exceeding the few wins as a cow's milk far exceeds its cream.

But no *court*, thinking in terms of compelling a license under one invention (cream) on an eminent domain theory, could order payment for other inventions (milk) which were costly to develop but which have no value and anyway are not being taken away by the eminent domain proceeding. The proposition almost seems stupid, merely to recite that for society to take Blackacre it must pay for the cost of Whiteacre, Pinkacre and even Purpleacre. But the cost of producing worthless milk is inseparable from the cost of producing the cream.

It follows, that the royalty that is reasonable to compensate for the taking of the property, a valuable patent, is by definition not reasonable to the support of an R&D effort. A royalty that is reasonable to compensate for the taking of the patent, is therefore an uncentive to invention.

### Third "Reasonable"

Now the third "reasonable," reasonable to "promote the progress of the useful arts."

Research is a peculiarly high-risk investment, with cost overruns certain and payouts long removed in time from the commitment of the capital. Moreover the payout is uncertain. When our client finished spending \$10 million developing the best in automatic transistor testers, the transistor manufacturers then made better transistors that did not need this testing. Thus, competitive R&D is no game for the fainthearted who carries or looks for a security blanket.

If the patent system is to induce the commitment of pri-

vate capital into R&D, it must not only pay the R&D and market development costs plus cover the unpredictable but certain-as-death-and-taxes cost overrun, it must not only compete in return on that investment, it must compete in size of the return in context of high uncertainty, in order to attract the money away from relatively "safe" mortgage, municipal bond, and real estate investments.

How do you attract capital from "safe" investments into R&D, other than by affording *on average*, a whopping bigger return on R&D investment than is available in "safe" investments? How do you induce investors to throw away their security blanket which shelters them from cost overruns?

The royalty that is reasonable, in context that on the average it will compete in attracting R&D capital from other promising investments, is typically too high to permit an effective price competition after the payment of the royalty. Thus, the reality in action of the judicial process of setting compulsory license "reasonable" royalties, is that it can rarely be set high enough to serve the constitutional purpose of promoting the useful arts, because a royalty that high often impedes price competition so severely as to make the license not worth obtaining.

### Experience Rating on Administratively-Set Royalty Rates.

We now have fairly significant precedent in Canada under §41 that pharmaceutical products will be compulsorily licensed at four percent:

- (i) independent of the cost of development of the particular pharmaceutical;
- (ii) independent of the number of separate inventions needed to bring the product to public enjoyment;
- (iii) independent of company R&D expense levels;
- (iv) independent of whether the public is suffering an unsatisfied need for the product or whether the product is generally available at prices society generally can pay.

If a company spends 10 or 12% of gross sales for R&D, as many U.S. pharmaceutical companies do, and gets 4% for compulsory license of the cream inventions and zero percent for the milk inventions, which cost as much as the cream inventions, the company cannot last long in R&D. That level of royalties that is now established by the Canadian law in action is clearly an uncentive to invention.

While the experience rating is not so rigid elsewhere, there are experience ratings in this country and elsewhere which tend to confirm this thought: administratively set royalties inevitably must become *precedent*-set royalties. And when so set the license they are supposed to render reasonable becomes unreasonable as an inducement for R&D irrespective of whether it may be reasonable for another purpose.

The experience rating society has on administratively set royalties, whether by Patent Offices or by courts, is that the compulsorily set royalty, is *not* a reasonable inducement to invent, *precisely because* it is reasonable either to afford cheap public access, or to compensate for the taking of a single "cream" property without paying for the milk.

So the decision for society through its lawmaking agencies, legislative, administrative and judicial, is whether competitive R&D to produce new and better products is more important to society than cheap pricing of products already in being. The one is a tradeoff as against the other.

As developed in other papers, it is uncontroversial that all compulsory licensing law is an uncentive to invention.

In this and that special circumstance the concept of compulsory licensing sells itself to legislators and judges as necessary public policy in spite of that fact. After all, what do you do with a bridge already carrying 10,000 cars a day across the Delaware River when the court finds it infringes a valid patent? Tear it down or license its use?

But in every circumstance compulsory licensing is another form of trade-off — a sacrifice of the incentive to innovate and progress the useful arts in exchange for some other alleged — and, sometimes false, public interest.

The crime is that people seem to think that compulsory licenses sacrifice only a private interest for a public interest. But the reality is that compulsory licenses sacrifice the public interest in new technology, in progress of the useful arts. This very real loss of public interest is never weighed in our system of law making against the alleged value of an antitrust policy.

\* \* \*

One inherent part of compulsory licensing practice reveals the major mischief of compulsory licenses. A compulsory license inevitably entails a *compulsorily set royalty*. That is my topic.

By all that is either law or equity a compulsorily set royalty must be reasonable. But reasonable for what purpose? The suit I wear is a reasonable wrap for a public speech in a hotel. It is an unreasonable wrap for a football game in 45° rain.

So too royalties. Royalties are chameleons that change the color of their reasonableness in reflection of their environment. While there is reference to research costs in Canada's §41, all the writings about the 1969 enactment of the Canadian Patent Act's §41 focus heavily upon "reasonable" for purposes of establishing public access to the product at the cheapest price. This is the first of three measures of "reasonable royalty" which I shall address.

Let us here recall that incentive to invent and to commit capital to invention comes from two sources:

1. Incentive A, the hope for profit on the investment in the R&D.
2. Incentive B, fear of a competitor getting a patent-protected technological advantage, like xerography over photostats for office copies.

Consider first, Incentive A, the profit incentive.

The 1969 Canadian §41 providing for compulsory licensing of foods and drugs and Senator Nelson's bills in our 92d and 93d Congresses, are clearly aimed at affording public access to the product at the cheapest possible price, and price competition among competitors at least some one of whom can be depended upon to indulge

- (i) no R&D;
- (ii) no safety testing of pharmaceuticals;
- (iii) no efficacy testing;
- (iv) no extensive administrative law procedures through Food and Drug Administration or pollution control agencies;
- (v) no education of the medical profession as to use, application, efficacy, side effects;
- (vi) no market development.

Rather, when others have at great expense in those ac-

tivities, created an onrushing wave of public demand, there is always one who would jump into the water and seek to harvest the foam off the wave of progress generated by others.

### Cheap Access

In many instances these expenses run 8, 10 and 12 percent of gross sales. If the compulsory royalty rate is selected to be "reasonable" to the purpose of affording to the public cheap access to the already-invented and market-developed product, then by definition the royalty rate cannot return the investment on those expenses, much less a profit on that investment. Still, society cannot be served with new inventions unless someone incurs those expenses.

Under such a system of royalty rates, companies commonly lose money by doing new things for society's benefit; it follows that the companies often must simply quit doing the new things for society. Such a royalty, "reasonable" for purposes of cheap public access to the product is a clear, positive uncentive for invention.

Turn now from the incentive A — hoped-for profit on the R&D investment, to incentive B — fear of a competitor's getting a protected technological advantage.

Two recent U.S. cases, *Aircraft Manufacturers Association*,<sup>24</sup> and the *Smog*<sup>25</sup> case, both involved industry associations where, to quote the Director of Policy Planning of the Justice Department:

[C]oncern was sparked by the fact that there was a compulsory industry-wide cross-licensing arrangement of all new directories . . . [wherein] the whole arrangement could legitimately be regarded as a sort of 'innovation insurance' for the individual firms. One could do little or nothing and be sure of never being behind your competitors — because if any of them discovered anything, he had to put it into the pool and license it to you at a relatively low rate. Such an arrangement may, of course, provide comfort to the parties, but it *dilutes competitive pressure to innovate*.<sup>26</sup>

Thomas Kauper, Assistant Attorney General in charge of the Antitrust Division, in April 1973 rendered an excellent opinion:

[T]he existence of mandatory patent or technology pooling or licensing provisions may in some circumstances reduce member and independent inventor incentives to engage in research.<sup>27</sup>

It is clear: If competitor X can rely upon a compulsory royalty rate that will permit him a posture of price competitiveness with Y, he enjoys a security blanket to protect him from Y's possibly getting a protected technological advantage.

Moreover, in R&D an unpredictable "cost overrun" is as sure as death and taxes. But nobody ever suffered a cost overrun in payment of royalties. The certainty of the sums paid in royalties is a security blanket offering comfort against the high risk R&D cost overruns. That security blanket is an uncentive to invention.

Thus, we see that on two counts, the first "reasonable," a royalty reasonable for purposes of insuring cheap, competitive public access to the invention, is an uncentive to invention.

Turn then to the second "reasonable," reasonable compensation for the taking of private property.

Should we worry more about price of a dramatic antibiotic, or about whether that antibiotic comes into being at all? For without it no one can have it at any price.

### "Voluntary" Licenses — In Terrorem of Compulsory Licenses.

Perhaps the most insidious part of the compulsory licensing concept, is that having a compulsory license available by law at precedent-set rates forces the patent owner to yield voluntary licenses *in terrorem*, often at rates below the real investment value of R&D-oriented endeavor.

Consider compulsory licensing as applied to two college professors who start their new high technology company on a shoestring and a prayer and borrowed money. Under compulsory licensing law, when they are offered the "privilege" of granting a license to a billion-dollar corporation with muscle and money or a court fight, they have received an offer which, in the words of Don Corleone, the Godfather, is "an offer they cannot refuse." How can they say "no" if there is any form of compulsory license right?

### EPILOGUE

"There are more people to feed with fewer resources. There is need for new things," said the Little Red Hen.

"Who will help me plow the ground?" asked the Little Red Hen.

"Not I," said the pig.

"Who will help me plant the seed of needed new things to come?" asked the Little Red Hen.

"Not I," said the pig.

"Who will help me weed the field, cull the crop, take the remaining goodies to market, and teach the public to use and enjoy what I have grown for them?"

"Not I," said the pig.

"Who will give me a 'reasonable' royalty to use my produce, a royalty low enough to enable him still to profit on what I risked when he would not?"

"I will!" shouted the pig.

A competitor who, but for his confidence (the Constitution and 35 U.S.C. § 154 notwithstanding) that there is no "exclusive right," would likely have planted his own seed and raised his own crop to feed and serve the people.

### NOTES

1. U.S. Constitution Art. I, §8.
2. *Id.*
3. 35 U.S.C. §154.
4. 35 U.S.C. §§154, 261.
5. 15 U.S.C. §1 et seq.
6. See, e.g., *Bement v. National Harrow Co.*, 186 U.S. 70 (1902); *Henry v. A. B. Dick*, 224 U.S. 1, 56 L. Ed. 645; *United States v. General Electric Co.*, 272 U.S. 476 (1926); *Standard Oil Company (Indiana) et al v. United States*, 283 U.S. 163, 51 S. Ct. 421 (1931); *General Talking Pictures Corp. v. Western Electric Co.*, 305 U.S. 124 (1938). *Contrast* *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 37 S. Ct. 416 (1917).
7. *United States v. General Electric*, 272 U.S. 476, 490 (1926).
8. *Id.* at 489.
9. 283 U.S. 27 (1931).
10. 272 U.S. at 489.
- 11a. *General Talking Pictures Corp. v. Western Electric*, 305 U.S. 124 (1938).
- 11b. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 37 S. Ct. 416 (1917) and *Carbice Corp. v. American Patents Development Corp.*, 283 U.S. 27 (1931).
12. 314 U.S. 488 (1942).

13. 314 U.S. 495 (1942).
14. 316 U.S. 265 (1942).
15. 316 U.S. 241 (1942).
16. 316 U.S. at 252.
17. 227 F. Supp. 791 (E.D. Mich. 1964), *aff'd per curiam*, 382 U.S. 197 (1965).
- 17a. The total R&D expenditures of the private sector of our economy, in real noninflationary dollars, has decreased 12% in the last ten years. New high technology companies are not being formed like Xerox, Texas Instruments, Polaroid of the period 10 to 30 years ago. *Business Week*, Feb. 16, 1976, *The Breakdown of U.S. Innovation*.
- 18a. See: cover story, *Business Week*, Feb. 16, 1976, "The Breakdown of U.S. Innovation" the National Science Foundation Study headlined in the March 14, 1976 *Houston Chronicle* "U.S. Is Losing Edge in Technology, Study Says."
- 18b. Interestingly two cases have been brought by the Department of Justice against licensing situations wherein the sin was destruction of incentive to invent. See footnotes 24 and 25 *infra*.
19. 7 U.S.C. §2321 et seq. (1970).
20. 7 U.S.C. §§2404, 2583 (1970).
21. 42 U.S.C. §1857 et. seq. (1970), *as amended* (Supp. 1974).
22. Patent Act Amendment 1969, 17-18 Eliz. II, C. 47, §1 (Can.).
23. *Foster v. American Machine and Foundry Co.*, 492 F.2d 1317 (2d Cir. 1974).
24. Civ. No. 72-1307 (S.D.N.Y. 1972).
25. *United States v. Automobile Manufacturers' Ass'n*, 307 F. Supp. 617 (C.D. Cal. 1969), *aff'd sub nom.*, *City of New York v. United States*, 397 U.S. 248 (1970).
26. Donald I. Baker, "Antitrust and Nonprofit Organizations," delivered Feb. 9, 1973, at the Ninth Annual Conference on Federal Tax and Other Problems of Non-Profit Organizations.
27. Attorney General, Opinion on Antitrust Law, delivered to FDA Bureau of Product Safety (1973).
28. *Milwaukee v. Activated Sludge, Inc.*, 69 F.2d 577 (7th Cir. 1934).

## Compulsory Licensing by FTC Decree

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sonable royalties or royalty-free, as an effective remedy for combating certain antitrust abuses, the bureau is also keenly aware of the danger of "discarding the baby with the bath water." The commission's sparing use of compulsory licensing orders in adjudicated cases seems to show its healthy respect for this extraordinary relief.

Notwithstanding these risks, the bureau also recognizes that, from a competitive viewpoint, few remedies can offer the potential affirmative impact that compulsory licensing affords. In the future, therefore, the bureau will try to achieve the perspective, technical expertise, and flexibility necessary to weigh these competing considerations.<sup>20</sup>

### NOTES

1. U.S. Constitution Part I, §8.
2. Federal Trade Commission Act §5, 15 U.S.C. §45 (1914).
3. See, e.g., *Federal Trade Commission v. Cement Institute*, 333 U.S. 683, 691 (1948).
4. *International Salt Co., Inc. v. United States*, 332 U.S. 392, 401 (1947).
5. *Hartford-Empire Co. v. United States*, 323 U.S. 386 (1945).
6. *Id.* at 414.
7. *United States v. National Lead Co.*, 332 U.S. 319 (1948).
8. *Id.* at 338.
9. See, e.g., *United States v. The Greyhound Corp.*, 1957 Trade Cas. ¶68,756 (S.D. 111, 1957); *United States v. General Electric Co.*, 115 F. Supp. 835 (D.N.J. 1953).
10. *The Vendo Company*, 54 F.T.C. 253 (1957).
11. Section 7 of the Clayton Act (15 U.S.C. §18) reads, in part: "... no corporation engaged in commerce shall acquire ... the stock ... or assets of another corporation ... where ... the effect of such acquisition may be substantially to lessen competition ..."
12. *The Vendo Company*, 54 F.T.C. at 256.
13. *American Cyanamid Co.*, 63 F.T.C. 1747 (1963), *vacated on other grounds*, 363 F.2d 757 (6th Cir. 1966), *on rehearing* 72 F.T.C. 623 (1967), *aff'd on appeal sub nom. Charles Pfizer & Co. v. FTC*, 401 F.2d