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INNOVATION AND ANTITRUST: SOME THOUGHTS ON GOVERNMENT PATENT POLICY**

It is a pleasure for me to be here tonight to share your table and to make a few remarks about two related topics: innovation and antitrust.

I was recently pleasantly surprised to learn that next year—on February 11th—there will be a National Inventor's Day. The legislative process by which National Inventor's Day came into being itself bears witness to the American inventive spirit. Some of you may have read that there would be no National Inventor's Day next year because S.J. Resolution 168 designed to establish it, after passing the Senate, failed to clear the House Post Office and Civil Service Committee. S.J. Res. 168 did manage to survive the legislative process, but as a rider to H.J. Res. 685 which establishes a National Firefighters' Day. You joggers will be pleased to know that S.J. Res. 166, authorizing the President to establish a National Jogging Day, also rode out of committee on the firefighters' resolution. This new resolution was voted out of the Senate and was referred also to the House Post Office Committee. It took a discharge petition to get this multi-purpose resolution onto the House floor, but it ultimately passed.

Maybe now we ought also to have a National Competitors' Day, although I suspect the legislative course of the resolution establishing it might be even more difficult.

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Competition and invention are clearly hallmarks of our private enterprise system. Both the antitrust laws and the patent laws aim ultimately at improving the welfare of consumers. Both sets of laws recognize the importance of innovative activity as a key to technological progress that, in the long run, contributes more to consumer welfare than does elimination of allocative inefficiencies in our economic system. Both the antitrust laws and the patent laws focus on the business incentives to innovate and to use the innovations in the marketplace.

My mail indicates that the patent bar and the antitrust bar have at times lost sight of what I believe to be these common ends in the antagonisms generated by debate on particular means.

In the hope of contributing some light on the inevitable (and quite proper) tensions between the patent and antitrust laws as they are applied as complementary tools to achieve common goals, let me restate some fundamentals and then tell you about some of our current activity.

Economists and antitrust commentators agree that innovative activity largely determines the pace of technological progress. We can also agree that investment in innovative activity is a relatively high risk enterprise—at least where it aims for more than minor product and process improvement. Furthermore, in the theoretical world of perfect competition—where there is perfect knowledge and no patent monopoly—even antitrust experts would agree that the full economic value of innovations could not be captured by the innovator because, once the innovation was disclosed and imitiated, the imitators' prices would not reflect development costs and would thus preclude the innovator from profiting from his investment in the discovery process. As Professors Areeda and Turner have put it, "A satisfactory rate of innovative activity thus depends upon

significant departures from the assumptions of perfect competition, and departures have occurred."[1]

Having stated some propositions that I'm sure are agreeable to you in the patent bar, let me also point out two propositions where I think you, on reflection, will have to agree with me: First, a real-world monopolist has little incentive to invest in or let the world see innovations in his field; indeed, innovations can be a threat to his monopoly profits. Second, real-world companies can use patents and patent licenses in attempts to monopolize significant segments of our commerce, for very anticompetitive ends and with results that do not benefit consumers.

As I'm sure you appreciate, we have statutory responsibility for preventing those real-world occurrences whenever possible. We hope that we prevent these while at the same time taking into account the earlier fundamentals that I mentioned.

At present we are actively participating in the President's Domestic Policy Review on Industrial Innovation. Our thesis is that our antitrust laws strengthen the competitive vigor of our economic system, tending not only to increase innovative outputs but also naturally discriminating in favor of and maximizing socially useful innovation. Let me share with you Judge Wyzanski's elegant words on this from the *United Shoe* case:

> . . . creativity in business as in other areas, is best nourished by multiple centers of activity, each following its unique pattern and developing its own espirit de corps to respond to the challenge of competition. The dominance of any one enterprise inevitably unduly accentuates that enterprise's experience and views as to what is possible, practical, and desirable with respect to technological development, research, relations with producers, employees, and customers. And the preservation of any unregulated monopoly is hostile to the industrial and political ideals of

[1] See generally for discussion of the fundamentals mentioned in this paragraph: F.M. Scherer, Industrial Market Structure and Economic Performance, Chap. 15 (1970); F.M. Scherer, "Economies of Scale and Industrial Concentration" in Industrial Concentration: The New Learning, pp. 16-54 (1974); Areeda and Turner, Antitrust Law § 407 (1978).

an open society founded on the faith that tomorrow will produce a better than the best. . . .[2]

The Antitrust Division is also contributing to the Department of Energy's Task Force on Compulsory Licensing of energy-related patents, and is representing the Justice Department on the Interagency Committee on Standards Policy. As you know, public and private standards making can have a dramatic impact on private incentives to innovate.

Finally, the Antitrust Division is heavily involved in an interagency effort to formulate a new government patent policy recommendation for the President. As some of you know, the Department of Justice, largely through the Antitrust Division, has been an active participant in the debate over how to assign the proprietary rights which arise out of government funded research. Recently we have begun an effort to develop a fresh perspective on this question with the hope of assisting the interagency committee toward a final resolution of the question. It is this effort on which I would like to focus the remainder of my remarks.

Since we haven't completed the review of our position, some might argue that my attempting to address the question publicly is somewhat premature; I hope it is at least innovative. My purpose in raising the topic now is to present some preliminary thoughts and to preview the analytical framework in which we would intend to address the government patent policy issue. Naturally, I hope that some of you will be moved to consider what is revealed tonight and to provide constructive criticism of what you hear. However, please do not assume that I am forecasting any particular bottom line, because I'm not.

At the outset, I would like to observe that too much abstract debate over seemingly polar extremes has gone on in this area, with substantive considerations fre-

[2] United States v. United Shoe Machinery Corp., 110 F. Supp. (D. Mass.) *aff'd*, 347 U.S. 521 (1954).

quently taking a back seat. The Justice Department has certainly not been blameless in this regard. However, much of my time recently has been devoted to getting the labels out of the way and opening the floor to substantive argument. If we do nothing else, I hope we can rationalize and advance the debate.

Traditionally, the Government Patent Policy discussion has centered on four issues—participation, disclosure, commercialization, and administrative cost. The proponent of any particular position normally argues that his solution will assure the largest number of highly qualified firms competing for the project, the most complete disclosure and highest rate of commercialization of inventions resulting from the project, and the lowest burden on the United States Treasury in administering not only the project but also any resultant patent rights. Permit me to make some observations on these four topics.

First, as to participation, it seems that so long as the research market is competitive the participation of the largest number of highly qualified firms may be assured no matter whether the government or the contractor takes title in resulting inventions. As taxpayers we hope that the government is funding research only in areas where the private sector is not already performing it. This means that where the government is involved, the expected private sector benefits to be obtained from a given piece of research are not greater than the cost of completing it. Consequently, the government must step in and through funding make up for the missing private incentives.

The private incentives are similar under either government patent policy. The research firm will gain experience in the area which may be valuable and will also be paid. However, under a title in the contractor policy, it will also obtain rights to any inventions resulting from the project. If all prospective contractors would value those marketable rights equally, their expected monopoly value, if any, should be competed away

in the bidding process. Of course, under a title in the government regime, the discounted value of the expected patent rights will not be included in the contractor's incentive equation, and the government should end up paying that amount more for the research it wants performed.

In a competitive research market, the contractors' cost calculations for performing the research in question will be approximately equal. Very skilled firms may devote fewer resources to the completion of the chore, but those resources can be expected to be of equal market value to the greater amount of resources which a less skilled contractor would be required to devote to completing the same task. This contractor cost equality should prevail no matter who—the contractor or the government—will gain title to any resultant patent rights.

Of course, if the research market is not competitive, the monopoly profits associated with inventions which might be expected to arise out of the project will not be competed away. The government will pay a supra-competitive price for the research and, under a title in the contractor regime, society will pay supra-competitive prices for the use of the invention. Adoption of a title in the government policy may eliminate the societal costs but will not reduce the governmental cost.

In addition, some research projects may spawn valuable inventions which were not predictable at the outset of the endeavor.[3] Under a title in the contractor regime, consumer welfare or dead weight losses will occur, but should be avoided under a title in the government policy. By definition, however, this consideration will not affect a firm's initial decision to participate or not to participate in the project.

Thus, if our analysis is correct, the participation issue may be a false one in the government patent policy debate. This theoretical conclusion is at odds with some of the factual information which had been developed

[3] By valuable, I mean an invention the returns from which so exceed commercialization costs, that its progress to the marketplace would have been assured with or without patent protection.

over the years. Anecdotal references do exist which suggest that contractors will be less willing to participate in projects where they will not gain title than in projects where they do. I'd like to hear your thoughts on this later this evening.

The next issue to be considered on this topic is the "disclosure" question. It is argued that under a title in the government policy, contractors will be inclined not to disclose fully all of the results of their research. Assuming—as I think we must—that this view is not idle skepticism about the quality of the American ethic in the post-Watergate era, how should we measure its importance?

One answer seems to be to measure the cost to the government of policing contractors to assure full disclosure. Depending on the type of project, this cost can range from zero to quite high. Where government people are working alongside the contractor or where applied research is being conducted, policing costs will be low. If the project is for basic research outside the supervision of government personnel, policing will be more costly. However, we cannot ignore the lower probability of this type of project's resulting in valuable invention or the considerable concealment and discovery costs to the contractor even in the absence of close government supervision. Indeed, we do not believe that disclosure has been a problem in private R&D contracting situations largely because of the high costs of concealment and the penalties in loss of reputation and future business caused by having concealment later discovered. Once again it appears that we have an issue which may not weigh substantially for or against the adoption of either policy. However, unlike the participation question, we have an issue which may weigh in favor of having a non-uniform government patent policy, depending on the type of research to be performed and the type of contractor performing it.

Third in our consideration is the "commercialization" question. It is argued that under a title in the contrac-

tor policy, inventions are more likely to be commercialized because of the exclusivity afforded to the private patent holder. This argument is repeated in the recent contractor's report to the Congressional Office of Technology Assessment entitled "Government Involvement in the Innovation Process." Therein much weight is placed on the apparent suggestion in the 1968 Harbridge House study that, in general, patents held by the government and licensed only on a nonexclusive basis are used much less often than those in the private sector. However, a title in the government policy as presently envisioned would not in any significant way risk such nonuse. The agency involved would be free to grant an exclusive license when necessary to assure commercialization.

Thus the risk of noncommercialization results only for classes of inventions for which commercialization costs exceed the returns available in a competitive market and which, for one reason or another, would not have been licensed on an exclusive basis by the government had it retained title. The preliminary question therefore must be—what is the social value of the inventions encompassed in this small class? Is this value greater or smaller than the losses to consumers or to the economy that would arise from the exclusive marketing of inventions which would have been commercialized even in the absence of exclusivity? Except for this small class of inventions, title in the government would appear to have advantages in assuring the most efficient commercialization of inventions, because rationally pursued the government could flexibly grant either exclusive or nonexclusive licenses depending on what was needed for commercialization.

Finally, we get to the important issue of administrative cost. Indeed, sometimes it appears that much of the push for the adoption of a title in the contractor policy emanates from those agencies who are, or would be, burdened with the administrative tasks associated with procuring and licensing the government patent rights which might arise from a title in the government

policy. Lest anyone be offended by this observation, I hasten to add that I think the administrative cost concern is extremely relevant. It is clear to me that when title does vest in the government, those public servants who are charged with the responsibility for making the decisions as to the appropriate licensing scheme take that responsibility very seriously and quite literally agonize over its discharge. Those decisions are expensive not only for the government but also for those in the private sector who are attempting to obtain the decision. There is a certain attractiveness to the simplicity of first granting patent rights to contractors and then expending scarce government resources—in "march-in" proceedings—only when it appears that the rights conferred are being abused through non-use or otherwise. Certainly it is clear that a comprehensive study of the government patent policy cannot ignore the administrative costs issue. The proponents of the title in the government policy cannot fail to give serious consideration to ways in which its attendant administrative costs can be brought under control. Nor can the proponents of a title in the contractor policy fail to address the administrative costs and delays of "march-in" proceedings.

We in the Antitrust Division are still considering these issues, which I hope you have found not too inappropriate for discussion after dinner. At least they are not another recitation of the nine "no-no's" of patent licensing, and we welcome your thoughts on them. I sincerely hope my remarks will combine with other efforts we have made recently to increase the friendly dialogue between the licensing bar and the Antitrust Division as we both pursue statutes with the common aim of benefitting the people of this country.