



# DEPARTMENT OF JUSTICE

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## INTELLECTUAL PROPERTY AND COMPETITION: FOUR PRINCIPLES FOR ENCOURAGING INNOVATION

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## I. INTRODUCTION

Good morning. I would first like to thank FIESP, ABPI, and PFF for inviting me to speak here today. I would like to speak with you about an issue of great importance to the Americas: defining the tools that permit a society to harness its inventive spirit into economic growth. We all know that innovation is a key driver of “surplus,” a term that economists use to refer to the wealth of a society. But historically we have struggled with the question of why some societies seem to have more innovation. Why do some societies bring more inventions to market than others?

The answer seems to have little to do with the nature of the population itself. When one accounts for differences in wealth and education, one can make a very good case that different nations are equally “inventive,” meaning that they have equal measures of the spark that says “I can do this faster, better, or more efficiently.” And certainly, there is no shortage of inventive spirit in the Americas. But invention and innovation are different things: innovation — which involves not just the inventive spark, but also the process of turning an invention into a product and bringing it all the way to market — requires planning, investment, and execution over time, things that can be either encouraged or discouraged by a system of laws and policy. So the puzzle of innovation can’t be explained by differences in the way populations “naturally” behave, but instead must be answered by observing the ways that rational people respond to differences in laws and policy. These responses are very predictable, and they can lead us to design a system that encourages growth. In fact, there is an emerging consensus that four elements help to create a dynamic economy: *first*, strong, enforceable intellectual property

rights;<sup>1</sup> *second*, IP licensing freedom; *third*, an understanding that IP rights are not the same as antitrust market power; and *fourth*, a system of sound competition law priorities. Today I would like to discuss each of these and tie them to the concept of dynamic efficiency, which is the economists' term for the key engine of economic growth.

## **II. FOUR ELEMENTS OF A PRO-GROWTH IP/COMPETITION SYSTEM**

### **A. PREDICTABLE, ENFORCEABLE IP RIGHTS**

The first step in encouraging innovation is to establish predictable, enforceable intellectual property rights. Since software is a focus of our conference, I will begin with a software example. Suppose a businessman here in Sao Paolo recognizes a need for a software program that instantly translates technical documents back and forth between English, Spanish, and Portuguese. To create this program, he and his employees will need to write thousands and thousands of lines of computer code.<sup>2</sup> He must hire many computer programmers and translators at a cost of, say, one million Brazilian Reais. He expects to be able to sell his program for 1000 Reais per copy, so he can break even if he sells 1000 copies. But on the day he begins selling the completed program, his competitors begin making exact copies for only 10 Reais apiece. And even worse, some of these unauthorized copies have defects, and there is nothing to stop the

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<sup>1</sup> See generally Alan Greenspan, Intellectual Property Rights, Address Before Stanford Institute of Economic Policy Research Economic Summit (Feb. 27, 2004), at <http://www.federalreserve.gov/boarddocs/speeches/2004/200402272/default.htm>.

<sup>2</sup> This describes a relatively simple program. Large programs require exponentially larger amounts of programmer time. As an extreme example, the Microsoft Windows 3.1 operating system, released in 1992, had 3.1 million lines of code. Windows XP, released in 2001, had 45 million lines of code. Subsequent versions of Windows have 50 million lines of code or more. See Microsoft Designer Summary Page, at <http://www.microsoft.com/resources/design/windows.html>.

competitors from putting our businessman's counterfeited name on them, so that customers call to blame him for any problems that occur, and tell their friends that our businessman's product is defective. How will he ever recoup his investment? How will he protect his good name? And how likely is he ever to try an investment like this again, in the future?

What this businessman needs is intellectual property protection. We all know the basics of intellectual property — patents, copyrights, trademarks, and trade secrets — but from a practical perspective, what do these rights mean to the businessman? They are just empty words unless they mean something that is predictable and enforceable.

Lawyers thrive on ambiguity; in fact, the more complicated a legal concept is, the more interesting we usually find it. Business does not run this way. An entrepreneur does not want to have a theoretical discussion about whether a particular design is copyrightable or whether a particular method could be covered by a patent. He has enough uncertainties to deal with. He wants a copyright law where the rules are clear in advance. He wants a patent office that works quickly and transparently. He wants a set of trademark rules that is clear about how he can protect his brand, and to what extent he needs to avoid encroaching on the brands of his competitors. In short, he wants the intellectual property laws and systems to be straightforward so that he knows how to invest his money, effort, and time.

Enforceability is equally important. In the world of physical property, enforceability means the right to exclude: for example, the ability to evict a person from your land. In the world of intellectual property, the fundamental right is similar: an enforceable IP right means the right to exclude others from using your intellectual property right at all. Since there is no way to build a fence around an IP right, businesses need the next best thing: quick access to the

courts and access to preliminary and permanent injunctions against infringement. For example, in the United States, courts have applied a presumption of irreparable harm that makes the issuance of injunctions the norm rather than the exception. We provide multiple damages and attorneys fees for most forms of “willful infringement,” meaning infringement undertaken in bad faith. These factors do not prevent defendants from competing, but they do mean that if a rival believes a piece of intellectual property is invalid, the burden is on the rival to show this up front if he is sued, rather than placing all the costs of enforcement on the intellectual property owner. The result is a system where IP rights are protected from erosion by rampant infringement, and all parties, whether IP owners or their rivals, understand the rules.

## **B. LICENSING FREEDOM**

The second step in a pro-growth IP and competition law regime is something we can term “licensing freedom.”<sup>3</sup> Once a firm obtains intellectual property and establishes the right to enforce it, the firm can proceed to commercialize its invention. The firm may use the IP itself, it may license it to others, it may do both, or it may even choose not to license or use the IP at all.

Licensing by one firm to another is a way to combine “complementary factors of production,”<sup>4</sup> a concept that deserves some explanation. The best innovators are not necessarily the best manufacturers, marketers, or retailers. A license can promote efficiency by permitting the IP owner to combine with another firm that is more skilled in these areas. The competition

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<sup>3</sup> See generally R. Hewitt Pate, Competition and Intellectual Property in the US: Licensing Freedom and the Limits of Antitrust, address at the EU Competition Workshop (June 3, 2005), at <http://www.usdoj.gov/atr/public/speeches/209359.htm>.

<sup>4</sup> See U.S. Dep’t of Justice & Federal Trade Comm’n, Antitrust Guidelines for the Licensing of Intellectual Property § 2.3 (Apr. 6, 1995) at <http://www.usdoj.gov/atr/public/guidelines/ipguide.htm>

authorities of the world’s three largest and most innovative economies all concluded long ago that, as a result, licensing should be presumed to be procompetitive: the United States made this point in its *Antitrust Guidelines for the Licensing of Intellectual Property* (“*IP Guidelines*”), and met with agreement in the EU’s *Technology Transfer Block Exemption* (“*TTBE*”) and the Japanese *Licensing Guidelines*. More recently, consensus has also begun to emerge that firms should be free to refuse to license and should be free to set royalties at whatever rate they choose. The right to refuse to license has been the subject of some controversy. Some argue that because antitrust law outside the intellectual property realm holds out the possibility of exceptions (although rare) to the principle that parties are free unilaterally to refuse to deal with others, there must also be *some* circumstance in which the unilateral, unconditional refusal to license a patent must constitute an antitrust violation. With a single much-criticized exception, this is an argument that has not found support in U.S. legal decisions. The notion of such liability was not even discussed in the *IP Guidelines*; instead, the *IP Guidelines* unequivocally state that, even in the case of IP that conveys market or monopoly power, such power does not “impose on the intellectual property owner an obligation to license the use of that property to others.”<sup>5</sup> This is hardly surprising, as the right to choose whether to license has long been recognized by the U.S. Supreme Court as the core of the patent right. To be sure, an intellectual property owner does not have the right to impose conditions on licensees that would effectively extend an intellectual property right beyond the limits of the Patent Act, but where the IP owner acts unconditionally, U.S. law is clear. This clarity was enhanced by the 2004 Supreme Court decision in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko*,

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<sup>5</sup> *Guidelines* Section 2.2.

*LLP*,<sup>6</sup> where the Court showed great skepticism about expanding liability for the refusal to deal because such liability “may lessen the incentive for the monopolist, the rival, or both to invest in . . . economically beneficial facilities” and “also requires antitrust courts to act as central planners . . . a role for which they are ill-suited.”<sup>7</sup> Although *Trinko* was not an intellectual property case — the rights in that case were governed by the Telecommunications Act — the same logic applies under the Patent Act.

The law on unconditional refusals in the EU is not as clear as it is in the United States, but the trend in the EU is encouraging. Cases that tread on the right to refuse are very rare in the EU. The most recent significant case to address the issue was *IMS Health*,<sup>8</sup> a 2004 decision in which the European Court of Justice considered whether one company could demand access to a type of copyrighted sales map created by another. The EU court began by stating that a refusal to license a copyright “cannot in itself” constitute an abuse of a dominant position. That seems to match the U.S. view on unilateral refusals to license. The court then added that liability might attach if: (1) the refusal prevents the emergence of a new product for which consumer demand exists; (2) the refusal is not justified by any objective considerations; and (3) the refusal excludes competition in a “secondary market.” It is not clear how these three factors will be interpreted, but two years later, it appears that this is a very difficult standard for a complaining party to

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<sup>6</sup> 540 U.S. 398 (2004).

<sup>7</sup> *Id.* at 407, 414-15.

<sup>8</sup> See *IMS Health GmbH & Co. OHG*, Case C-418/01 (April 29, 2004) at ¶¶ 34, 38, 53, at [http://europa.eu.int/smartapi/cgi/sga\\_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=62001J0418](http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=62001J0418).

meet. In any event, the court's statement that a refusal to license "cannot in itself" constitute an abuse of a dominant position appears to be the more important part of the case, and represents a major step toward global consensus on this issue.

A consensus would make good sense. When analyzing the effects of a unilateral refusal to deal, one cannot merely consider the effect on a rival that is refused a license; one must also consider the alternative world in which the IP owner would have had less of an incentive to innovate because he could not be assured of the right to refuse to license. Would that IP owner have chosen to innovate less? If so, would competition or consumer welfare have been better off with the present state of affairs, including the right to refuse? In the *short* term, it can seem efficient to disregard the IP right and allow duplication, but the IP system rests on the idea of *long*-term innovation incentives, so we must think about the long-term effects of a rule imposing liability in this context. That is entirely consistent with antitrust policy related to exclusionary conduct, which also focuses on dynamic competition and long-term effects.

Licensing freedom also means the right to charge whatever royalty the IP owner wishes. Competition law enforcers, who are the usual recipients of complaints about "excessive" royalties, are not in the business of price control. We protect a competitive process, not a particular result, and particularly not a specific price. In fact, if a monopoly is lawfully obtained, whether derived from IP rights or otherwise, we do not even object to setting a monopoly price. When a complainant begins a presentation by telling the Antitrust Division that a royalty rate is "excessive," the staff responds that the complainant is putting the cart before the horse. A complaining party must first identify some anticompetitive conduct beyond a mere unilateral



refusal to license and beyond the mere attempt to charge, where a lawful monopoly exists, a monopoly price.

Before I leave the subject of licensing freedom, I should say a word about compulsory licenses. The Uruguay Round’s agreement on Trade Related Aspects of Intellectual Property Rights (“TRIPS”) places severe restrictions on compulsory licenses of intellectual property, for good reason. United States competition policy does the same.<sup>9</sup> Compulsory licensing can be an effective remedy in some contexts — for example, in merger cases, it can serve as a more targeted alternative to a divestiture, thereby preserving efficiencies — but in the first instance, there must be conduct that warrants a remedy. This is the important point: compulsory licensing is only a remedy, not a separate liability theory. And there are practical reasons to tread carefully when considering compulsory licensing: designing and enforcing such licenses is complex and can be an invitation to endless ancillary compliance litigation. As explained in the *Trinko* case, a court should not impose a duty to deal that it cannot reasonably supervise, since this risks “assum[ing] the day-to-day controls characteristic of a regulatory agency.”<sup>10</sup> For these and other reasons, compulsory licensing of intellectual property as an antitrust remedy should be rare.

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<sup>9</sup> See Makan Delrahim, Forcing Firms to Share the Sandbox: Compulsory Licensing of Intellectual Property Rights and Antitrust, address before the British Institute of International and Comparative Law (May 10, 2004), at <http://www.usdoj.gov/atr/public/speeches/203627.pdf>.

<sup>10</sup> *Trinko*, 540 U.S. at 415 (quoting P. Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 853 (1989)).

### C. NO PRESUMED MARKET POWER FROM IP RIGHTS

My third pillar of a pro-growth IP and competition regime deals with whether legal rules will presume market power from ownership of IP rights. While intellectual property grants exclusive rights, these rights are not monopolies in the economic sense: they do not necessarily provide a large share of any “relevant market” in antitrust parlance and they do not necessarily lead to the ability to raise prices in any market. A single patent, for example, may have dozens of close substitutes. The mere presence of an intellectual property right does not permit an antitrust enforcer to skip the crucial steps of market definition and determining market effects.

The United States Department of Justice and the Federal Trade Commission have long taken the view that IP rights cannot be presumed to create market power; their *IP Guidelines* stated this view explicitly.<sup>11</sup> The plaintiffs in a recent case in the United States challenged that view, and a lower court sided with the plaintiffs and held that a patent *does* raise a presumption of market power in an IP tying case.<sup>12</sup> Last month, the United States Supreme Court unanimously reversed and cited both the *IP Guidelines* and the consensus of academic economists as the basis for its decision.<sup>13</sup> As a result, the issue is now settled in the United States.

The assumption that intellectual property leads automatically to market power is the product of a misunderstanding about the fundamental nature of intellectual property. Properly applied, intellectual property is additive to a marketplace. It arises when someone makes a new

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<sup>11</sup> *IP Guidelines* at Section 2.2.

<sup>12</sup> *Independent Ink, Inc. v. Illinois Tool Works, Inc.*, 396 F.3d 1342 (Fed. Cir. 2005).

<sup>13</sup> *Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 126 S. Ct. 1281 (2006).

invention or trade secret, or writes a new song, or creates new goodwill in a trademark; in other words, the creation of intellectual property tends to add to consumer choices, rather than to reduce them. The development of intellectual property for new technological solutions, for example, does not cause people magically to forget all the older solutions, and it usually does not even cause older solutions to be withdrawn from a marketplace; instead, it increases competition, which tends to erode the prices of the old solutions over time, increasing choice and consumer welfare. The competition laws normally are concerned with activity that excludes, not activity that creates new choices, so they should not view intellectual property with skepticism. It is certainly possible for intellectual property to create market power, but it is not likely enough to warrant even a rebuttable presumption. And when market power does accrue, it is usually the product of consumers choosing the new solution despite the availability of the old — hardly a scenario that should automatically raise concern.

#### **D. SOUND COMPETITION LAW PRIORITIES**

Finally, the fourth element of a pro-innovation set of policies is set of sound competition law priorities. Foremost among these are an effects-based approach to antitrust analysis and a competition law regime that saves its greatest condemnation for price fixing cartels, not conduct by single firms.

Effects-based analysis avoids rigid rules in favor of a focus on the ultimate question of whether a practice harms competition. There is no shortage of rules that have been proposed to serve as shortcuts for antitrust analysis. In the United States, the Department of Justice in the 1970s attempted to list a set of rules — which became known as the “Nine No-No’s” — to judge whether an intellectual property licensing practice should be judged anticompetitive. The

European Union’s original *Technology Transfer Block Exemption* set forth a series of rules and market tests for the same purpose, designating certain practices as essentially prohibited and creating antitrust safe harbors for others. But both agencies found that their rules were too blunt to be used as effective tools in the fast-developing technology area. The problem with these rules, as with most rigid tests, is that they create “false positives”: the tendency for the rule to condemn behavior that in a significant number of cases is procompetitive and efficiency-enhancing.

The United States agencies abandoned the “No-No’s” approach and later replaced it with their *IP Guidelines*, which adopted a focus on effects: licensing restraints are to be evaluated by looking not only at the restraint itself, but also at the horizontal or vertical relationship of the parties, the concentration of the market, the responsiveness of the market to supply and demand changes, and other factors such as ease of entry by rivals.<sup>14</sup> The EU made a similar major leap forward when its 2004 revised *TTBE* dropped most of its rigid tests in favor of an effects-based approach and when, for the first time, it issued a set of accompanying licensing guidelines that explained how competition authorities would examine practices for the ultimate effect on competition. Leading antitrust agencies such as Canada’s and Japan’s have also embraced the effects-based method because there is consensus that the false positives of rule-based systems can frustrate business, impede the economy, and waste scarce competition enforcement resources.

There is one rigid rule that makes good sense, however, and that is the rule against price fixing. The fixing of prices, output, and territories by cartels has no plausible efficiency

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<sup>14</sup> *IP Guidelines* at Section 4.1.

justification and is properly treated as a criminal violation of the antitrust laws. In the United States and Canada, this is known as the per se rule against price fixing. In Europe, this is known as the rule against “hard core” cartels. At meetings of the recently-formed International Competition Network, participants tends to use the term “cartelization.” By whatever name, the consensus is clear: the fixing of prices, output, and territory is “the supreme evil of antitrust”<sup>15</sup> and should be the first priority of antitrust enforcers everywhere.

In the United States, we have stated our antitrust priorities as an explicit hierarchy.<sup>16</sup> At the top of this hierarchy is enforcement against cartels. As our second priority, we review mergers using the best analytical tools available, and we make judgments on whether the effects of the merger may be substantially to lessen competition or to tend to create a monopoly. And third, we analyze nonmerger civil cases – which include unilateral conduct – in a cautious and objective manner, mindful that it is often difficult to tell the difference between anticompetitive conduct and good, hard competition. It is worth noting that most IP-related practices, such IP licensing, fall into this third category. As the hierarchy moves from per se conduct to nonmerger civil actions, it moves from the least chance of false positive to the greatest, and our level of caution increases accordingly.

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<sup>15</sup> *Trinko*, 540 U.S. at 408.

<sup>16</sup> *See generally* R. Hewitt Pate, Securing the Benefits of Global Competition, address before the Tokyo America Center (September 10, 2004), *at* <http://www.usdoj.gov/atr/public/speeches/206428.htm>.

### **III. STATIC AND DYNAMIC EFFICIENCY**

I have now walked through the emerging consensus about four pillars of a pro-growth economic system: predictable, enforceable IP rights; IP licensing freedom; an understanding that IP should not be presumed to create market power; and a competition law that focuses on effects and saves its greatest condemnation for cartels. What is the economic mechanism that turns these elements into growth? The answer to that question lies in the concepts of static and dynamic efficiency, which is my last topic today.

Static efficiency describes the tendency of a marketplace to reduce costs by refining existing products and capabilities. In a free, highly competitive economy, competing firms quickly adapt to an existing technology and drive the price of an existing product down to something close to the cost of production (marginal cost). This is a tremendously positive system that leaves surplus in the hands of consumers. The goal of sound competition laws is to protect this process by removing artificial constraints – chiefly, monopolization and cartelization – that would attempt to protect individual competitors from these market forces and would try to raise prices above the competitive level. Note that the goal of sound competition law is the protection of competition itself, not individual competitors; it is inevitable that some competitors will fail over time, but this only means that inefficient producers are removed from the equation and their resources (investment, management, and employees) are brought back into the system to a more efficient use. Static efficiency is a powerful force, and the competition laws are important tools for seeing that it functions unimpeded. But static efficiency alone is not enough to ensure economic growth.

The greater driver of growth is dynamic efficiency, which refers to gains that result from entirely new ways of doing business. The famous economist Josef Schumpeter, who was instrumental in exposing the link between growth and dynamic efficiency, described it as “competition from the new commodity, the new technology, the new source of supply, the new organization ... competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives.”<sup>17</sup> Dynamic efficiency involves innovation, and innovation involves risk. How do we encourage this dynamism?

The problem is that where dynamic efficiency and innovation require a large upfront investment – as new technologies increasingly do – the same forces that promote static efficiency can deter dynamic efficiency. If rivals quickly adopt a new innovation and drive production costs and prices to their lowest levels, this can impair the chances that any large, fixed, upfront investment can be recouped. To return to my software example from the beginning of my remarks, we will remember that innovators are not irrational; they will not innovate if it bankrupts them. This is where the other pillars of a pro-growth system come in: IP rights give innovators the financial incentive to undertake the risks of dynamic competition; licensing freedom permits innovators to find the royalties that will reward them and the most efficient co-producers that can bring products to consumers; and the recognition that IP rights do not presumptively create market power helps to ensure that successful innovators will not be bogged down by rivals who misuse the competition laws to force compulsory licenses or other

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<sup>17</sup> J. SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY 84 (1942).

erosions of IP rights. Dynamic efficiency is a hallmark of growth-oriented economies, and the elements I have discussed today are fundamental for making dynamic efficiency possible.

Developing economies have made great strides in the last century in promoting the rule of law and the basics of market economics, but as we have seen, these are not necessarily enough for the creation of robust growth. These things create the right conditions for static efficiency, but only predictable, enforceable intellectual property rights, and the other factors I mentioned, will create the ideal conditions for dynamic efficiency to flourish. The United States believes, and we believe our economic success has proved, that creating a dynamic private market with strong IP rights is the most efficient way to drive economic growth, because private and individual decisions simply tend to be quicker, more varied, and more directly responsive to consumer demands than are government decisions. We also believe that government has a role to play via strong competition enforcement, so long as the competition law priorities are correct.

Thank you very much for having me here to speak to you today. I look forward to speaking to you at the rest of this conference and to working with those of you in the competition enforcement community to implement the elements of this emerging consensus and to promote economic growth in the Americas.