Department of Justice

FOR IMMEDIATE RELEASE
MONDAY, AUGUST 8, 1994

AT
(202) 616-2771
TDD (202) 514-1888

JUSTICE DEPARTMENT RELEASES DRAFT INTELLECTUAL PROPERTY GUIDELINES FOR PUBLIC COMMENT

WASHINGTON, D.C. -- The Department of Justice proposed new antitrust guidelines for the licensing and acquisition of intellectual property today, recommending for the first time the creation of a "safety zone" to encourage licensing arrangements that do not unfairly inhibit competition.

The draft guidelines, which will be adopted in final form after a 60-day public comment period, cover the licensing and acquisition of intellectual property protected by patent, copyright and trade secret law. They would replace the intellectual property portions of the 1988 Antitrust Enforcement Guidelines for International Operations.

An Antitrust Division task force chaired by Deputy Assistant Attorney General Richard Gilbert wrote the draft guidelines.

Anne K. Bingaman, Assistant Attorney General in charge of the Antitrust Division, said, "The antitrust laws and the intellectual property laws share the common purpose of promoting innovation and enhancing consumer welfare. Our intellectual

(MORE)

property enforcement policy is about keeping American companies strong and innovative.

"The draft guidelines will ensure that sound antitrust enforcement will continue to serve as a catalyst to technological innovation and promote U.S. competition here and abroad by preventing arrangements that inhibit innovation or restrain competition without promoting the development of intellectual property," Bingaman added.

The guidelines include:

• An antitrust "safety zone" in which the Department will not challenge most restraints in licensing arrangements where the licensor and its licensees account for no more than 20 percent of each relevant market affected by the restraints. "This proposal seeks to address widespread concern that small businesses and innovators are hampered by antitrust uncertainty," Gilbert said.

• Methods by which the Department, under certain circumstances, will evaluate the impact of a licensing arrangement or acquisition on research and development.

Several basic principles of antitrust enforcement for intellectual property are unchanged. They include:

• The antitrust laws apply to intellectual property as they apply to other forms of property, with appropriate recognition of the distinguishing characteristics of intellectual property.

• Antitrust enforcement should not unnecessarily interfere with the licensing and transfer of intellectual property rights.

(MORE)

• The existence of an intellectual property right does not, by itself, give rise to a presumption of market power.

The Department will publish the draft guidelines in the Federal Register for public comment.

"We welcome the views of the business and legal communities and of the general public and, where appropriate, we will modify the draft guidelines in response to comments," Gilbert said.

Comments should be submitted in writing within 60 days of publication of the draft guidelines in the Federal Register to Richard Gilbert, Deputy Assistant Attorney General, Antitrust Division, Department of Justice, 10th Street and Pennsylvania Avenue, N.W., Washington, D.C. 20530.

###

94-451

DRAFT

U.S. Department of Justice Antitrust Guidelines for the Licensing and Acquisition of Intellectual Property[1]

1. Intellectual property protection and the antitrust laws

These Guidelines state the antitrust enforcement policy of the U.S. Department of Justice with respect to the licensing and acquisition of intellectual property protected by patent, copyright, and trade secret law.[2] By stating its general policy, the Department hopes to assist those who need to predict whether the Department will challenge a practice as anticompetitive. However, these Guidelines cannot remove judgment and discretion in antitrust law enforcement. Moreover, the standards set forth in these Guidelines must be applied in unforeseeable circumstances. Each case will be evaluated in light of its own facts, and these Guidelines will be applied reasonably and flexibly.

In the United States, patents confer rights to exclude others from making, using, or selling in the United States the invention claimed by the patent for a period of seventeen years from the date of issue.[3] To gain patent protection, an invention (which may be a product, process, machine, or composition of matter) must be novel, nonobvious, and useful. Copyright protection applies to original works of authorship embodied in a tangible medium of expression.[4] A copyright protects only the expression, not the underlying ideas. Unlike a patent, which protects an invention not only from copying but also from independent creation, a copyright does not preclude others from independently creating similar expression. Trade secret protection applies to information whose economic value depends on its not being generally known. Trade secret protection is conditioned upon efforts to maintain secrecy and

---

[1] These Guidelines supersede section 3.6 in Part I, "Intellectual Property Licensing Arrangements," and cases 6, 10, 11, and 12 in Part II of the U.S. Department of Justice 1988 Antitrust Enforcement Guidelines for International Operations.

[2] These Guidelines do not cover the antitrust treatment of trademarks. Although the same general antitrust principles that apply to other forms of intellectual property apply to trademarks as well, these Guidelines deal with innovation-related issues that typically arise with respect to patents, copyrights, and trade secrets, rather than with product-differentiation issues that typically arise with respect to trademarks.

[3] *See* 35 U.S.C. § 154 (1988). In the case of process patents, the protection extends to importation of goods made by a patented process. *See* 19 U.S.C. § 1337 (1988 & Supp. V 1993); 35 U.S.C. § 271(g) (1988).

[4] *See* 17 U.S.C. § 102 (1988 & Supp. V 1993). Copyright protection lasts for the author's life plus 50 years, or 75 years from first publication (or 100 years from creation, whichever expires first) for works made for hire. *See* 17 U.S.C. § 302 (1988).

has no fixed term. As with copyright protection, trade secret protection does not preclude independent creation by others.[5]

Although there are clear and important differences in the purpose, extent, and duration of protection provided under the intellectual property regimes of patent, copyright, and trade secret, the governing antitrust principles are the same. Antitrust analysis takes differences among these forms of intellectual property into account in evaluating the specific market circumstances in which transactions occur, just as it does with other particular market circumstances.

The intellectual property laws and the antitrust laws share the common purpose of promoting innovation and enhancing consumer welfare.[6] The intellectual property laws provide incentives for innovation and its dissemination and commercialization by establishing enforceable property rights for the creators of new and useful products, more efficient processes, and original works of expression. In the absence of intellectual property rights, imitators could more rapidly exploit the efforts of innovators and investors without compensation, thereby reducing the commercial value of innovation and eroding the incentives to invest. The antitrust laws promote innovation and consumer welfare by prohibiting certain actions by firms that deter those firms and others from competing with respect to either existing or new ways of serving consumers.

2. General principles

2.0 These Guidelines embody three general principles: (a) for the purpose of antitrust analysis, the Department regards intellectual property as being essentially comparable to any other form of property; (b) the Department does not presume that intellectual property creates market power in the antitrust context; and (c) the Department recognizes that intellectual property licensing allows firms to combine complementary factors of production and is generally procompetitive.

---

[5] The principles stated in these Guidelines also apply to protection of mask works fixed in a semiconductor chip product (*see* 17 U.S.C. § 901 *et seq.* (1988)), which is analogous to copyright protection for works of authorship. These principles also generally apply to licensing of know-how and other collections of information which may not be protected by intellectual property rights, but which may nonetheless have value to a licensee or transferee because of the form into which they are assembled.

[6] "[T]he aims and objectives of patent and antitrust laws may seem, at first glance, wholly at odds. However, the two bodies of law are actually complementary, as both are aimed at encouraging innovation, industry and competition." *Atari Games Corp. v. Nintendo of America, Inc.*, 897 F.2d 1572, 1576 (Fed. Cir. 1990).

2.1 Standard antitrust analysis applies to intellectual property

The Department applies the same general antitrust principles to conduct involving intellectual property that it applies to conduct involving any other form of tangible or intangible property. That is not to say that intellectual property is in all respects the same as any other form of property. Intellectual property has important characteristics that distinguish it from many other forms of property. These characteristics can be taken into account by standard antitrust analysis, however, and do not require the application of fundamentally different principles.

Intellectual property law bestows on the owners of intellectual property certain rights to exclude others. These rights help the owners to profit from the use of their property. An intellectual property owner's rights to exclude are similar to the rights enjoyed by owners of other forms of private property. As with other forms of private property, certain acquisitions of intellectual property, and certain types of agreements with respect to such property, may have anticompetitive effects against which the antitrust laws can and do protect. Intellectual property is thus neither particularly free from scrutiny under the antitrust laws, nor particularly suspect under them.

2.2 Intellectual property and market power

Market power is the ability profitably to maintain prices above, or output below, competitive levels for a significant period of time.[7] The Department will not presume that a patent, copyright, or trade secret necessarily confers market power upon its owner. Although the intellectual property right confers the power to exclude with respect to the *specific* product, process, or work in question, there will often be sufficient actual or potential close substitutes for such product, process, or work to prevent the exercise of market power.[8] If a patent or other form of intellectual property does confer market power, that market power does not by itself offend the antitrust laws. As with any other tangible or intangible asset that enables its

---

[7] Market power can be exercised in other economic dimensions, such as quality, service and innovation. It is assumed in this definition that all competitive dimensions are held constant except the ones in which power is being exercised; it would not, of course, be indicative of market power that a seller is able to charge higher prices for a higher-quality product. The definition in text is stated in terms of a seller with market power; a buyer could also exercise market power (*e.g.*, by maintaining the price below the competitive level, thereby depressing output).

[8] The Department notes that the law is unclear on this issue. *Compare Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 16 (1984) (expressing the view in dictum that if a product is protected by a patent, "it is fair to presume that the inability to buy the product elsewhere gives the seller market power") *with id.* at 37 n.7 (O'Connor, J., concurring) ("[A] patent holder has no market power in any relevant sense if there are close substitutes for the patented product."). *Compare also Abbott Laboratories v. Brennan*, 952 F.2d 1346, 1354-55 (Fed. Cir. 1991) (no presumption of market power from intellectual property right) *with Digidyne Corp. v. Data General Corp.*, 734 F.2d 1336, 1341-42 (9th Cir. 1984) (requisite economic power is presumed from copyright), *cert. denied*, 473 U.S. 908 (1985).

owner to obtain significant supracompetitive profits, market power (or even a monopoly) that is solely "a consequence of a superior product, business acumen, or historical accident" does not violate the antitrust laws.[9] Nor does such market power impose on the intellectual property owner an obligation to license that technology to others. *See, e.g., SCM Corp. v. Xerox Corp.*, 645 F.2d 1195 (2d Cir. 1981), *cert. denied*, 455 U.S. 1016 (1982). As in other antitrust contexts, however, market power could be illegally acquired or maintained, or, even if lawfully acquired and maintained, would be relevant to the ability of an intellectual property owner to harm competition through unreasonable conduct in connection with such property.

2.3 Procompetitive benefits of licensing

Intellectual property typically is one component among many in a production process and derives value from its combination with complementary factors. Complementary components of production include manufacturing and distribution facilities, workforces, and other items of intellectual property. The owner of intellectual property has to arrange for its combination with other necessary inputs to realize its commercial value. Often, the owner finds it most efficient to contract with others for these inputs, to sell rights to the intellectual property, or to enter into a joint venture arrangement for its development, rather than supplying these complementary inputs itself.

Licensing, cross-licensing, or otherwise transferring intellectual property (hereinafter "licensing") can facilitate its integration with complementary factors of production. This integration can lead to more efficient exploitation of the intellectual property, benefiting consumers through the reduction of costs and the introduction of new products. Such arrangements increase the value of intellectual property to consumers and to the developers of the technology. By potentially increasing the expected returns from intellectual property, licensing also can increase the incentive for its creation and thus promote greater investment in research and development.

Sometimes the use of one item of intellectual property requires access to another. An item of intellectual property "blocks" another when the second cannot be practiced without using the first. For example, an improvement on a patented machine can be blocked by the patent on the machine. Licensing promotes the coordinated development of technologies that are in a blocking relationship.

Field-of-use, territorial, and other limitations on intellectual property licenses may serve procompetitive ends by allowing the licensor to exploit its property as efficiently and effectively as possible. These various forms of exclusivity can be used to give a licensee an incentive to invest in the commercialization and distribution of products embodying the licensed intellectual property and to develop additional applications for the licensed property.

---

[9] *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966); *see also United States v. Aluminum Co. of America*, 148 F.2d 416, 430 (2d Cir. 1945) (Sherman Act is not violated by the attainment of market power solely through "superior skill, foresight and industry").

The restrictions may do so, for example, by protecting the licensee against free-riding on the licensee's investments by other licensees or by the licensor. They may also promote the licensor's incentive to license, by protecting the licensor from competition in the licensor's own technology in a market niche that it prefers to keep to itself. These benefits of licensing restrictions apply to patent, copyright, and trade secret licenses.

Example 1[10]

Situation: Delta, Inc. develops a new software program for inventory management. The program has wide application in the health field. Delta licenses the program in an arrangement that imposes both field of use and territorial limitations. Some of Delta's licenses permit use only in hospitals; others permit use only in group medical practices. Delta charges different royalties for the different uses. All of Delta's licenses permit use only in specified geographic areas. The license contains no provisions that would prevent or discourage licensees from developing, using, or selling any other program. None of the licensees are actual competitors of Delta in the sale of inventory management programs.

Discussion: The key competitive issue raised by the licensing arrangement is whether it harms competition that would likely have taken place in its absence. (*See* section 3.) Such harm could occur if the licenses foreclose access to competing technologies (in this case, most likely competing computer programs), prevent licensees from developing their own competing technologies (again, in this case most likely computer programs), structure royalties to impose an effective requirements contract upon licensees, or facilitate market allocation or price-fixing for any product or service supplied by the licensees. If the license agreements contained such provisions, the Department would analyze their competitive effects as described in sections 3-5 of these Guidelines. In this hypothetical, there are no such provisions, and there is no apparent harm to competition. The arrangement appears to do no more than increase the value of the licensed technology by subdividing it among different fields of use and territories and charging royalties that differ among licensees. The Department therefore would be unlikely to object to this arrangement. The result would be the same whether the technology was protected by copyright, patent, or trade secret. The Department's conclusion as to competitive effects could differ if, for example, the license barred licensees from using any other inventory management program.

---

3. Antitrust concerns and modes of analysis

3.1 Nature of the concerns

While intellectual property licensing arrangements are typically welfare-enhancing and procompetitive, antitrust concerns may arise when licensing arrangements impede competition that likely would have taken place in the absence of the license. Licensing arrangements that may raise antitrust concerns include restrictions on goods or technologies other than the

---

[10] The examples in these Guidelines are hypothetical and do not represent judgments about the actual market circumstances of the named industries.

licensed technology, contractual provisions that penalize licensees for dealing with suppliers of substitute technologies, and acquisitions of intellectual property that lessen competition in a relevant antitrust market.

For example, a licensing agreement that transfers little or no useful intellectual property, but imposes restraints upon entities that otherwise would compete using alternative technologies, might have significant adverse effects in downstream goods markets or in other markets. (*See, e.g.*, Example 5.) An arrangement that effectively merges the research and development activities of two of only a few entities that could plausibly engage in research and development in the relevant field might harm competition for development of new intellectual property. (*See* section 3.2.3, "Innovation Markets.")

Intellectual property licensing between actual or likely potential competitors[11] may raise antitrust concerns by reducing or eliminating competition in the market(s) in which they compete or are likely to compete. In addition, license restrictions with respect to one market may reduce competition in another market by, for example, foreclosing access to or raising the price of an important input (other than as a natural consequence of the licensee acquiring a licensed technology for its own use).

3.2 Markets affected by licensing arrangements

A licensing arrangement may affect competition in a variety of markets. In general, for goods markets and technology markets affected by a licensing arrangement, the Department will approach the delineation of relevant market and the measurement of market share in the intellectual property area in the same way that it treats such questions under section 1 of the 1992 Horizontal Merger Guidelines. In addition, the Department may define an innovation market to aid in assessing whether a licensing arrangement would be likely substantially to reduce investment in research and development.

3.2.1 Technology markets

Technology markets consist of the intellectual property that is licensed, transferred, or acquired and the technologies that are close substitutes for it. The owner of a process for producing a particular good may be constrained in its conduct with respect to that process not only by other processes for making that good, but also by other goods that compete with the downstream good and by the processes used to produce those other goods.

In many cases, particularly in the case of a product patent, there may be little to be gained by analyzing competitive effects in a separate technology market in addition to analyzing effects in the associated goods market. Moreover, there may be practical problems

[11] A firm will be treated as a likely potential competitor if its entry is likely under the standards of section 3.3 of the U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (April 2, 1992), or if there is evidence of likely actual entry by that firm. Competitive concerns are more likely to arise when the number of actual and likely potential competitors is not large.

in gathering appropriate data to determine "prices" for the technology and its substitute processes. For example, the technology may be licensed royalty-free in exchange for the right to use other technology, or it may be licensed as part of a package license. When complicating factors preclude delineating a relevant market in which the licensed technology competes, the Department may focus its attention on effects in the associated goods markets.

To estimate the market share of a participant using new technology, the Department generally will forecast market acceptance over a two-year period using the best available information. For technologies not yet commercialized, the two-year period will begin with commercial introduction. When market shares or other indicia of market power are not readily available, and it appears that competing technologies are all equally efficient,[12] the Department's analysis will treat each participant in the technology market as having an equal market share.

3.2.2 Goods markets

A number of different goods markets may be relevant to evaluating the effects of a licensing arrangement. A restraint in a licensing arrangement may have competitive effects in markets for final or intermediate goods made using the intellectual property, or it may have effects upstream, in markets for goods that are used as inputs, along with the intellectual property, to the production of other goods.

3.2.3 Innovation markets

Firms compete in research and development that may result in new or improved products or processes. If the capacity for research and development activity that likely will produce innovation in technology is scarce and can be associated with identifiable specialized assets or characteristics of specific firms (which may or may not currently participate in the relevant technology or goods markets), it may be appropriate to consider separately the impact of the conduct in question on competition in research and development among those firms. The firms identified as possessing these specialized assets or characteristics can be thought of as competing in a separate innovation market. *See* Complaint, *United States v. General Motors Corp.*, Civ. No. 93-530 (D. Del., filed Nov. 16, 1993). Alternatively, innovation markets may be used to assist with the identification of competitive effects in relevant goods and technology markets. *See, e.g.*, Complaint, *United States v. Flow International Corp.*, Civ. No. 94-71320 (E.D. Mich., filed Apr. 4, 1994).

---

[12] In this analysis, the Department will regard two technologies as being "equally efficient" if they can be used to produce, at the same cost, goods perceived by consumers to be close substitutes.

Example 2

Situation: Two companies agree to cross-license future patents relating to the development of a new component for aircraft jet turbines. Innovation in the development of the component requires the capability to work with very high tensile strength materials. Aspects of the licensing arrangement raise the possibility that competition in research and development of this and related components will be lessened. The Department is considering whether to define an innovation market in which to evaluate the competitive effects of the arrangement.

Discussion: If the firms that have the capability to work with very high tensile strength materials can be reasonably identified, the Department will consider defining a relevant innovation market for development of the new component. If the number of firms with the required capability is small, the Department may employ the concept of an innovation market to analyze the competitive effects of the arrangement in that market, or as an aid in analyzing competitive effects in technology or goods markets. In this analysis, the Department would take into account the specific nature of the restraint, the likelihood that other firms may in the future acquire the requisite capability, other competitive factors, and any efficiency justifications for the licensing arrangement.

If the number of firms with the required capability is very large (either because there are a large number of such firms in the jet turbine industry, or because there are many firms in other industries with the required capability), then the Department will conclude that the innovation market is competitive. Under these circumstances, it is unlikely that any single firm or plausible aggregation of firms could acquire a large enough share of the assets necessary for innovation to have an adverse impact on competition.

If the Department cannot reasonably identify the firms with the required capability, it will not attempt to define an innovation market.

Just as goods markets are improperly defined if the firms in the market, were they to coordinate their decisions, would not profitably increase price above competitive levels, so too innovation markets are improperly defined if hypothetical coordination among the firms in the candidate market would not profitably retard or restrict innovation in the technology.

When a relevant innovation market has been defined, the Department may assess the competitive significance of each participant based on shares of those identifiable assets or characteristics upon which innovation depends, on shares of research and development expenditures, on shares of the related product, or on equal shares assigned to reflect the equal likelihood of innovating, depending on the facts of each case. *Cf.* 1992 Horizontal Merger Guidelines § 1.41 & n.15. In evaluating competitive effects, the Department would also take into account other factors such as competitive harms from the elimination of alternative research paths and efficiency benefits from the integration of complementary research and development programs.

3.3 Horizontal and vertical relationships

As with other property transfers, antitrust analysis of intellectual property licensing arrangements examines whether the relationship of the parties to the arrangement is primarily horizontal or vertical in nature, or whether it has substantial aspects of both.

A licensing arrangement has a horizontal component with respect to a technology market if it involves the acquisition of rights to technologies that are economic substitutes for technologies that the licensee owns or controls. For analytical purposes, the Department ordinarily will treat a relationship between a licensor and its licensees as horizontal with respect to a particular goods market when the licensor and its licensees would be actual or likely potential competitors in that market absent the license.

An arrangement has a vertical component when it affects activities that are in a complementary relationship, as is typically the case in a licensing arrangement. Such a relationship exists when the licensor and its licensees stand in a seller-buyer relationship, or operate at different levels of the chain of production and distribution. For example, the licensor's primary line of business may be in research and development, and the licensees, as manufacturers, may be buying the rights to use technology developed by the licensor. Alternatively, the licensor may be a component manufacturer owning intellectual property rights in a product that the licensee manufactures by combining the component with other inputs, or the licensor may manufacture the product, and the licensees may operate primarily in distribution and marketing. Although licensing arrangements typically have a vertical component, the licensor and its licensees may also have a horizontal relationship in the market containing the technology being licensed or in other markets in which they are actual or likely potential competitors.

The existence of a horizontal relationship between a licensor and its licensees is not inherently suspect. Identification of such relationships is merely an aid in determining whether there may be anticompetitive effects arising from a licensing arrangement. Such a relationship need not give rise to an anticompetitive effect, nor does a purely vertical relationship assure that there are no anticompetitive effects.

The following examples illustrate different competitive relationships among a licensor and its licensees.

Example 3

Situation: Alpha, a manufacturer of farm equipment, develops a new emission control technology for its tractor engines and licenses it to Beta, another farm equipment manufacturer. Alpha's emission control technology is far superior to the technology currently owned and used by Beta, so much so that Beta's technology does not discipline the prices that Alpha could charge for its technology. Beta has no likelihood of developing an improved emissions control technology on its own.

Discussion: Alpha's and Beta's emission control technologies are not economic substitutes for each other. Beta is a consumer of Alpha's technology and is not an actual or likely potential competitor of Alpha in the relevant market for technologically superior emission control devices of the kind licensed by Alpha. This means that the relationship between Alpha and Beta with regard to the supply and use of emissions control technology is vertical. Assuming that Alpha and Beta sell farm equipment products that are economic substitutes for each other, their relationship is horizontal in the relevant markets for farm equipment.

Example 4

Situation: Beta develops a new valve technology for its engines and enters into a cross-licensing arrangement with Alpha, whereby Alpha licenses its emission control technology to Beta and Beta licenses its valve technology to Alpha. Alpha already owns an alternative valve technology that is an economic substitute for Beta's valve technology. Before adopting Beta's technology, Alpha was using its own valve technology in its production of engines and was licensing (and continues to license) that technology for use by others. As in Example 3, Beta does not own or control an emission control technology that is an economic substitute for the technology licensed from Alpha.

Discussion: Beta is a consumer and not a competitor of Alpha's emission control technology. As in Example 3, their relationship is vertical with regard to this technology. The relationship between Alpha and Beta in the relevant market that includes engine valve technology is vertical in part and horizontal in part. It is vertical in part because Alpha and Beta stand in a complementary relationship, in which Alpha is a consumer of a technology supplied by Beta. However, the relationship between Alpha and Beta in the relevant market that includes engine valve technology is also horizontal in part, because both firms own valve technologies that are economic substitutes for each other. Whether the firms license their valve technologies to others is not important for the conclusion that the firms have a horizontal relationship in this relevant market. Even if Alpha's use of its valve technology were solely captive to its own production, the fact that the two valve technologies are economic substitutes means that the two firms have a horizontal relationship. For the firms to be in a horizontal relationship, it is also not necessary that Alpha actually uses its valve technology prior to licensing technology from Beta, provided that Alpha's technology is an economic alternative to Beta's.

As in Example 3, the relationship between Alpha and Beta is horizontal in the relevant markets for farm equipment.

3.4 The rule of reason and per se rules

In the vast majority of cases, restraints in intellectual property licensing arrangements are evaluated under the rule of reason (*see* section 4). In some cases, however, the courts conclude that a restraint's "nature and necessary effect are so plainly anticompetitive" that it should be treated as unlawful per se, without an elaborate inquiry into the restraint's purpose and effect. *National Society of Professional Engineers v. United States*, 435 U.S. 679, 692 (1978). Among the restraints that have been held per se unlawful are naked price-fixing, output restraints, and market division among horizontal competitors, as well as certain group boycotts and resale price maintenance.

To determine whether a particular restraint in a licensing arrangement is given per se or rule of reason treatment, the Department will first determine whether the restraint in question can be expected to contribute to an efficiency-producing integration of economic activity. In general, licensing arrangements promote such integration because they facilitate the combination of the licensor's intellectual property with complementary factors of production owned by the licensee. A restraint in a licensing arrangement may further such integration by, for example, aligning the incentives of the licensor and the licensees to promote the development and marketing of the licensed technology, or by substantially reducing transactions costs.

In assessing whether a particular restraint contributes to an efficiency-producing integration, the Department briefly will review, inter alia, the business of the parties to the license, the markets in question, and the purpose and effect of the particular restraint. If there is no efficiency-producing integration of economic activity and if the type of restraint is one that otherwise is appropriately accorded per se treatment, the Department will challenge the restraint under the per se rule. Otherwise, the Department will apply a rule of reason analysis.

Because licensing arrangements typically involve vertical relationships that create significant integrative efficiencies, restraints associated with those arrangements usually will have sufficient relationship to an efficiency-producing integration to merit analysis under the rule of reason. An ordinarily suspect restraint incorporated in a licensing agreement will not escape per se treatment, however, if the putative integration itself is a sham or if there is an insufficient relationship between the restraint and an efficiency-producing integration.

Example 5

Situation: Gamma, which manufactures Product X using its patented process, offers a license for its process technology to every other manufacturer of Product X. The process technology does not represent an economic improvement over the available existing technologies. Indeed, although several manufacturers accept licenses from Gamma, none of the licensees actually uses the licensed technology. The licenses provide that each manufacturer has an exclusive right to sell Product X manufactured using the licensed technology in a designated geographic area and that no manufacturer may sell Product X, however manufactured, outside the designated territory.

Discussion: The manufacturers of Product X are in a horizontal relationship in the goods market for Product X. Those that are licensees of Gamma's process technology would also be in a vertical relationship with Gamma if they actually used Gamma's technology, although in this example, that is not the case. Any manufacturers of Product X that control technologies that are economic substitutes for Gamma's process are also horizontal competitors of Gamma in the relevant technology market.

The licensing arrangement restricts competition in the relevant goods market among manufacturers of Product X. The restriction applies both to Product X that is manufactured with the licensed technology and to Product X manufactured with any other technology. The latter restriction is the key competitive concern because it harms competition that would have taken place in the absence of the licensing agreement. Such a restriction could conceivably benefit competition by promoting the adoption of Gamma's technology (*see* Example 6). In this example, however, the technology is not being used despite being licensed. If further investigation shows that there is no likelihood that the manufacturers of Product X will use Gamma's technology, the Department is likely to conclude that there are no conceivable benefits from the license restrictions.

If the Department concludes that the restraint does not contribute to an efficiency-producing integration of economic activity, the Department would be likely to challenge the arrangement under the per se rule as a horizontal territorial market allocation scheme and to view the intellectual property aspects of the arrangement as a sham intended to cloak its true nature. Since such a restraint is per se unlawful, the Department likely would challenge the arrangement even absent proof of substantial market power by the licensor and the licensees.

The competitive implications do not generally depend on whether the licensed technology is protected by patent, is a trade secret or other know-how, or is a computer program protected by copyright. Nor do the competitive implications generally depend on whether the allocation of markets is territorial, as in this example, or functional, based on fields of use.

Example 6

Situation: As in Example 5, Gamma offers a license to every other manufacturer of Product X for the patented process that it uses to manufacture Product X. The license provides that each manufacturer has an exclusive right to sell Product X manufactured using the licensed technology in a designated geographic area, and that no manufacturer may sell Product X, however manufactured, outside its designated territory. As in Example 5, several manufacturers accept licenses. In this example, however, the licensed process is an advance over their previously used process. Furthermore, Gamma's licensed process is the sole technology used by the licensees.

Discussion: The competitive relationships of the firms in this example are the same as in Example 5 and the licensing restraint has a similar effect on competition among the manufacturers of Product X. This example is distinguished from the previous example in that the licensed technology is useful, and, indeed, is used extensively by the licensees. As a consequence, the vertical dimension of the licensing agreement, and the benefits of the licensing restrictions in promoting the adoption of the technology, assume greater importance.

Again, the key competitive issue is the effect of the territorial restraint in the licensing arrangement on competition in the goods market that includes Product X. The restraint applies to all sales of Product X, without regard to whether it was made using the licensed technology. Such a restraint could have a benefit in promoting manufacturing and marketing efforts on behalf of the licensed technology, in part by making it easier for Gamma to monitor use of its licensed technology. The benefits come at the cost of restricting competition that would have taken place in the absence of the licensing arrangement. If the restraint contributes to an efficiency-enhancing integration of economic activity, the Department would evaluate this arrangement under the rule of reason. It would take into account such factors as the share of the licensor and the licensees in the relevant markets affected by the licensing arrangement, the level of concentration and difficulty of entry in these markets, and the promotional benefits to be gained by focusing manufacturing and marketing efforts on the licensed technology.

4. General principles concerning the Department's evaluation of licensing arrangements under the rule of reason

4.1 Antitrust "safety zone"

Absent extraordinary circumstances, the Department will not challenge a restraint in a licensing arrangement if (1) the restraint is not of a type that normally warrants condemnation under the per se rule and (2) the licensor and its licensees collectively account for no more

than twenty percent of each relevant market affected by the restraint.[13] This "safety zone" is designed to provide owners of intellectual property with a degree of certainty, so as to encourage procompetitive licensing arrangements. It is not intended to discourage parties falling outside the safety zone from adopting restrictions in their license arrangements that are reasonably necessary to achieve an efficiency-producing integration of economic activity. The Department will analyze arrangements falling outside the "safety zone" based on the considerations outlined in this section.

This "safety zone" does not apply to transactions that amount to mergers or acquisitions, which are governed by the 1992 Horizontal Merger Guidelines.

The Department will include innovation market shares in its evaluation of whether a licensing arrangement falls within the safety zone only if the assets required to compete in research and development are specialized and identifiable. If not, the Department will confine its analysis to the goods and technology markets affected by the licensing arrangement.

4.2 General statement of the rule of reason

In analyzing a restraint in a licensing arrangement under the rule of reason, the Department first inquires whether the restraint has an anticompetitive effect. If so, the Department next inquires whether the restraint is reasonably necessary to achieve procompetitive benefits that outweigh those anticompetitive effects. *See NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984); *see also* 7 Phillip A. Areeda, *Antitrust Law*, § 1502 (1986). In pursuing these inquiries, the Department will be guided by several general principles. These principles apply to both vertical and horizontal licensing restraints that are analyzed under the rule of reason.

4.3 Analysis of anticompetitive effects

The existence of anticompetitive effects resulting from a restraint in a licensing arrangement may be evaluated on the basis of a variety of factors taken together, including the following.

4.3.1 Market structure, coordination, and foreclosure

When a licensor and its licensees compete in technology or goods markets, a restraint in a licensing arrangement may increase the risk of coordinated pricing, output restrictions, or the acquisition or maintenance of monopoly power. The potential for competitive harm generally increases with the degree of concentration in, the difficulty of entry into, and the

[13] As stated in section 1.41 of the 1992 Horizontal Merger Guidelines, market shares for goods markets "can be expressed either in dollar terms through sales, shipments, or production, or in physical terms through measurement of sales, shipments, production, capacity, or reserves." Special considerations affect the measurement of market shares in some technology markets. The measurement of market shares in that context is discussed in section 3.2.1.

inelasticities of supply and demand in markets in which the licensor and licensees are in a horizontal relationship. *Cf.* 1992 Horizontal Merger Guidelines, §§ 1.5, 3.

When the licensor and licensees are in a vertical relationship, harm to competition from a restraint may occur if it forecloses access to, or increases competitors' costs of obtaining, important inputs (other than as a natural consequence of the licensee acquiring a licensed technology for its own use). An example is a licensing arrangement with most of the established manufacturers in an industry preventing those manufacturers from using any other technology. The risk of foreclosing access or increasing competitors' costs is related to the fraction of the markets affected by the licensing restraint and to other characteristics of the input and output markets, such as concentration, difficulty of entry, and elasticities of supply and demand.

Harm to competition from a restraint in a vertical licensing arrangement also may occur if a licensing restraint facilitates coordination to raise prices or reduce output in markets in which one of the parties participates. For example, if owners of competing technologies impose similar restraints on their licensees, the licensors may find it easier to coordinate their pricing. Similarly, licensees that are horizontal competitors may find it easier to coordinate their pricing if they are subject to common license restraints imposed either by a common licensor or by competing licensors. The risk of anticompetitive coordination is increased when the relevant markets are concentrated and difficult to enter.

4.3.2 Licensing arrangements involving exclusivity

A licensing arrangement may involve exclusivity in two distinct respects. First, the licensor may grant one or more *exclusive licenses*, which restrict the right of the licensor to license others and possibly also to practice the technology itself. Generally, such a grant of exclusivity may raise antitrust concerns only if the licensees themselves, or the licensor and its licensees, are actual or potential competitors in a relevant technology or goods market in the absence of the licensing arrangement. Examples of exclusive licenses with possible competitive consequences include cross-licensing by parties collectively possessing market power (*see* section 5.5), grantbacks (*see* section 5.6), and acquisitions of intellectual property rights (*see* section 5.7).

A second form of exclusivity, *exclusive dealing*, arises when a license prevents or restrains the licensee from using competing technologies. Such restraints can have the effect of denying rivals sufficient outlets for exploiting their technologies and thus be anticompetitive. Exclusivity may be required by the licensor, as in an explicit exclusive dealing arrangement (*see* section 5.4), or induced through economic incentives. For example, a royalty arrangement based on total sales of a licensee's product, regardless of whether it is made using the licensed technology, may increase the cost to a licensee of substituting alternative technologies, and thus may have effects similar to an exclusive dealing arrangement. *See* Complaint, *United States v. Microsoft, Inc.*, Civ. No. 94-1564 (D.D.C., filed July 15, 1994); Competitive Impact Statement, *id.* (filed July 27, 1994). Whether a restraint

of this kind has anticompetitive effects depends, inter alia, on the availability of other outlets for competitively viable exploitation of rival technologies.

Restraints that impose or encourage exclusive dealing may have procompetitive effects. For example, a licensing arrangement that prevents the licensee from dealing in other technologies may encourage the licensee to develop and market the licensed technology or specialized applications of that technology. *See, e.g.*, Example 7. The Department will take into account such procompetitive effects in evaluating the reasonableness of the arrangement. *See* section 4.4.

The Department will focus on the actual practice and its effects, not on the formal terms of the arrangement. A license denominated as non-exclusive (either in the sense of exclusive licensing or in the sense of exclusive dealing) may nonetheless give rise to the same concerns posed by formal exclusivity. A non-exclusive license may have the effect of exclusive licensing if it is structured so that the licensor is unlikely to license others or to practice the technology itself. A license that does not explicitly require exclusive dealing may have the effect of exclusive dealing if it is structured to make it costly for licensees to use competing technologies. However, a licensing arrangement will not automatically raise these concerns merely because a party chooses to deal with a single licensee or licensor, or confines his activity to a single field of use or location, or because only a single licensee has chosen to take a license.

Example 7

Situation: Eta, the inventor of a new flat panel display technology, lacking the capability to bring a flat panel display product to market, grants Rho an exclusive license to make and sell a product embodying Eta's technology. Rho does not currently sell a product that would compete with the product embodying the new technology or control rights to another display technology. Several firms offer competing displays, the relevant markets for manufacturing and distribution of such displays are unconcentrated, and entry into these markets is relatively easy. Demand for the new technology is uncertain and successful market penetration will require considerable promotional effort. The license contains an exclusive dealing restriction preventing Rho from selling products that compete with the product embodying the licensed technology.

Discussion: This example illustrates both types of exclusivity in a licensing arrangement. The license is exclusive in that it restricts the right of the licensor to grant other licenses. In addition, the license has an exclusive dealing component in that it restricts the licensee from selling competing products.

The inventor of the display technology and its licensee are in a vertical relationship and do not compete in the manufacture or sale of display products or in the sale of technology. Hence, the grant of an exclusive license does not affect competition between the licensor and the licensee. The exclusive license may promote competition by encouraging Rho to develop and promote the new product in the face of uncertain demand by rewarding Rho for its efforts if they lead to large sales. Although the license bars the licensee from selling competing products, this exclusive dealing aspect is unlikely in this example to harm competition by foreclosing access or facilitating anticompetitive pricing because several firms offer competing products, the relevant manufacturing and distribution markets are unconcentrated, and entry is easy. On these facts, the Department would be unlikely to challenge the arrangement.

4.3.3 Benefits to the parties from reduction of competition

In some cases, the benefits of a restraint in a licensing arrangement to the licensor or its licensees may derive primarily from reductions in competition that likely would have occurred absent the license rather than from the restraint's relationship to efficiency-producing objectives of the arrangement. In determining whether to challenge a particular restraint in a licensing arrangement, the Department will assess evidence indicating which of these possibilities better describes the purpose and effect of the restraint.

4.3.4 Other factors

Factors such as a history of rivalry and a rapid pace of innovation are also relevant to an analysis of the potential for harm to competition. The presence of these factors may indicate that licensors and licensees are less likely successfully to engage in coordinated behavior to raise prices or restrict output, and their absence may signal a greater likelihood of such behavior.

4.4 Efficiencies and justifications

If the Department finds that a restraint in a licensing arrangement has an anticompetitive effect, the Department will consider whether the restraint produces offsetting procompetitive effects, such as by facilitating the efficient development and exploitation of intellectual property. If offsetting benefits are established, the Department will determine whether the restraint is reasonably necessary to achieve the efficiencies. If the restraint is reasonably necessary, and if the efficiencies outweigh the anticompetitive effect, the Department will not challenge the licensing arrangement.

The Department's comparison of anticompetitive harms and procompetitive efficiencies is necessarily a qualitative one. The risk of anticompetitive effects in a particular case may be insignificant compared to the expected benefits, or vice versa. As the expected anticompetitive effects in a particular licensing arrangement increase, the Department will look for evidence establishing with greater certainty that the arrangement achieves net benefits.

The existence of practical and significantly less restrictive alternatives is relevant to a determination of whether a restraint is reasonably necessary. If it is clear that the parties could have achieved similar efficiencies by means that are significantly less restrictive, then the Department will not give weight to the parties' efficiency claim. In making this assessment, however, the Department will not engage in a search for a theoretically least restrictive alternative that might be easier to construct in hindsight than in the practical prospective business situation faced by the parties.

When a restraint has an anticompetitive effect, the duration of that restraint can be an important factor in determining whether it is reasonably necessary to achieve the putative procompetitive effect. The effective duration of a restraint may be dependent on a number of factors, including the option of the affected party to terminate the arrangement unilaterally and the presence of contract terms (*e.g.*, unpaid balances on minimum purchase commitments) that encourage the licensee to renew a license arrangement. Consistent with its approach to less restrictive alternative analysis generally, the Department will not attempt to draw fine distinctions regarding duration; rather, its focus will be on situations in which the duration clearly exceeds the period needed to achieve the procompetitive effect.

The evaluation of procompetitive efficiencies, of the reasonable necessity of a restraint to achieve them, and of the duration of the restraint may depend on the market context. A restraint that may be justified by the needs of a new entrant, for example, may not have a procompetitive efficiency justification in different market circumstances. *Cf. United States v. Jerrold Electronics Corp.*, 187 F. Supp. 545 (E.D. Pa. 1960), *aff'd per curiam*, 365 U.S. 567 (1961).

4.5 Restraints subject to a quick-look analysis

A rule of reason analysis may require no more than a "quick look" at the anticompetitive effects of a particular restraint and the extent to which the restraint is reasonably necessary to achieve an efficiency-producing integration. When the restraint is one that ordinarily warrants per se treatment, and a quick look at the claimed efficiencies reveals that the restraint is not reasonably necessary to achieve procompetitive efficiencies, the Department will likely challenge the restraint without further analysis. *See FTC v. Indiana Federation of Dentists*, 476 U.S. 447, 459–60 (1986); *NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85, 109–10 & n.39 (1984).

5. Application of general principles

This section illustrates the application of these principles to particular licensing restraints and to arrangements that involve the cross-licensing, pooling, or acquisition of intellectual property. The restraints and arrangements identified are typical of those that are likely to encounter antitrust scrutiny; however, they are not intended as an exhaustive list of practices that could raise competitive concerns.

5.1 Horizontal restraints

While licensing arrangements among horizontal competitors, like joint ventures, often promote rather than hinder competition, there are a number of circumstances in which antitrust scrutiny is warranted. Generally speaking, the licensor and the licensee are deemed to be horizontal competitors only if they own or control technologies that are economic substitutes for each other or if they are competitors in a goods market other than through the use by the licensee of the licensed technology. *See* section 3.3. Consistent with the principles set forth in section 3.4, the Department will challenge certain types of horizontal restraints as per se unlawful in appropriate cases. Horizontal restraints in licensing arrangements that constitute price fixing, allocation of markets or customers, agreements to reduce output, and certain group boycotts may merit per se treatment. In other cases, the restraints will be evaluated under the rule of reason, following the general principles set forth in section 4.

Example 8

Situation: Two of the leading manufacturers of a consumer electronic product hold patents that cover alternative circuit designs for the product. None of the patents is blocking; that is, each of the patents can be practiced without infringing a patent owned by the other firm. The different circuit designs are economic substitutes. Each permits the manufacture at similar cost of products that consumers consider to be interchangeable. The manufacturers assign their patents to a separate corporation wholly owned by the two firms. That corporation licenses the right to use the circuit designs to other consumer product manufacturers and establishes the license royalties.

Discussion: In this example, the manufacturers are horizontal competitors in the goods market for the consumer product and in the related technology markets. The competitive issue with regard to a joint assignment of patent rights is whether the assignment has an adverse impact on competition in technology and goods markets that is not outweighed by procompetitive benefits in the use or dissemination of the technology. Each of the patent owners has a right to exclude others from practicing its patent. That right does not extend, however, to the agreement to assign rights jointly. To the extent that the patent rights cover technologies that are substitutes, the joint determination of royalties may result in higher royalties and higher goods prices than the owners would have charged on their own. In the absence of evidence establishing efficiencies from the joint assignment of patent rights, the Department may conclude that the joint marketing of competing patent rights constitutes horizontal price fixing and could be challenged as a per se unlawful horizontal restraint of trade. If there are plausible efficiency justifications for the joint marketing arrangement, the Department would evaluate the arrangement under the rule of reason. However, the Department may conclude that the anticompetitive effects are sufficiently apparent, and the proposed integrative efficiencies are sufficiently weak or unrelated to the restraints, to require only a "quick look" rule of reason analysis (*see* section 4.5).

5.2 Resale price maintenance

Resale price maintenance is illegal when "commodities have passed into the channels of trade and are owned by dealers." *Dr. Miles Medical Co. v. John D. Park & Sons Co.*, 220 U.S. 373 (1911). It has been held per se illegal for a licensor of an intellectual property right in a product to fix a licensee's resale price of that product. *United States v. Univis Lens Co.*, 316 U.S. 241, 243–45, 249–51 (1942); *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 446–48, 452, 457 (1940).[14] Consistent with the principles set forth in section 3.4, the

[14] *But cf. United States v. General Electric Co.*, 272 U.S. 476 (1926) (holding that an owner of a product patent may condition a license to manufacture the product on the fixing of the *first* sale price of the patented product). Subsequent lower court decisions have distinguished the *GE* decision in various contexts. *See, e.g., Royal Indus. v. St. Regis Paper Co.*, 420 F.2d 449, 452 (9th Cir. 1969) (observing that *GE* involved a restriction by a patentee who also manufactured the patented product and leaving open the question whether a nonmanufacturing patentee may fix the price of the patented product); *Newburgh Moire Co. v. Superior Moire Co.*, 237 F.2d 283, 293-94 (3rd Cir. 1956) (grant of multiple licenses each containing price restrictions does not come within the *GE* doctrine); *Cummer-Graham Co. v. Straight Side Basket Corp.*, 142 F.2d 646, 647 (5th Cir.)

Department will enforce the per se rule against resale price maintenance in the intellectual property context.

5.3 Tying Arrangements

A transaction is said to involve tying if: (1) there are two separate products, and (2) the sale of one product is conditioned on the purchase of the other. Thus, conditioning the ability of a customer to license one or more items of intellectual property on the customer's purchase of another item of intellectual property or a good or service has been held to constitute illegal tying. *See, e.g., United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 156–58 (1948) (copyrights); *International Salt Co. v. United States*, 332 U.S. 392 (1947) (patents). Tying can, however, be efficiency-enhancing under some circumstances. *See, e.g., Jerrold Electronics Corp. v. Westcoast Broadcasting Co.*, 341 F.2d 653 (9th Cir.), *cert. denied*, 382 U.S. 817 (1965). The Department would be likely to challenge a tying arrangement if: (1) the seller has sufficient economic power in the market for the tying product to enable it to restrain trade in the market for the tied product, (2) the arrangement has an adverse effect on competition in the relevant market for the tied product, and (3) efficiency justifications for the arrangement do not outweigh the anticompetitive effect.[15] The Department will not presume market power solely from the existence of a patent or other intellectual property right.[16]

Package licensing—the licensing of multiple items of intellectual property in a single license or in a group of related licenses—may be a form of tying arrangement, but only if the items licensed constitute "separate products" and the licensing of one product is used to force the acceptance of a license of another. Such practices can be efficiency enhancing under some circumstances. When multiple licenses are needed to practice any single item of intellectual property, for example, a package license may present such efficiencies. If a package license constitutes a tying arrangement, the Department will evaluate its competitive effects under the same principles it applies to other tying arrangements.

5.4 Exclusive dealing

In the intellectual property context, exclusive dealing occurs when a license prevents the licensee from licensing, selling, distributing, or using a competing technology. Although such

---

(owner of an intellectual property right in a process to manufacture an unpatented product may not fix the sale price of that product), *cert. denied*, 323 U.S. 726 (1944); *Barber-Colman Co. v. National Tool Co.*, 136 F.2d 339, 343-44 (6th Cir. 1943) (same).

[15] As is true throughout these Guidelines, the factors listed are those that guide the Department's internal analysis in exercising its prosecutorial discretion. They are not intended to circumscribe how the Department will conduct the litigation of cases that it decides to bring, nor to opine on how the courts should resolve questions that are currently unsettled in the case law.

[16] *See* section 2.2. This policy is consistent with the requirement that market power be demonstrated to establish patent misuse based on tying. 35 U.S.C. § 271(d) (1988) (as amended by Pub. L. No. 100-703, 201 Stat. 4676 (1988)).

restraints can be procompetitive in some circumstances, in other situations they can deny rivals sufficient outlets for competitively viable exploitation of their technologies and thus can be anticompetitive. *See* section 4.3.2.

5.5 Cross-licensing and pooling arrangements

Cross-licensing and pooling arrangements are agreements of two or more owners of different items of intellectual property to license one another or third parties. These arrangements may promote economic welfare by integrating complementary technologies, reducing transaction costs, clearing blocking positions, and avoiding costly infringement litigation. By promoting the dissemination of technology, cross-licensing and pooling arrangements are often procompetitive.

Cross-licensing and pooling arrangements can have anticompetitive effects in certain circumstances. When these arrangements are a mechanism to accomplish price fixing, or market or customer allocation, they can lead to a significant lessening of competition. *See United States v. New Wrinkle, Inc.*, 342 U.S. 371 (1952) (price fixing); *United States v. United States Gypsum Co.*, 333 U.S. 364 (1948) (customer allocation). The joint marketing of pooled intellectual property rights, with collective price setting or coordinated output restrictions, may violate section 1 of the Sherman Act. *Compare NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984) (output restriction on college football broadcasting held unlawful because it was not reasonably related to any purported justification) *with Broadcast Music, Inc. v. CBS*, 441 U.S. 1 (1979) (blanket license for music copyrights upheld because the cooperative price was found necessary to the creation of a new product).

Settlements involving the cross-licensing of intellectual property rights can be an efficient means to avoid litigation over infringement and interference proceedings, and, in general, courts favor such settlements. When such cross-licensing involves horizontal competitors, however, the Department will consider whether the effect of the settlement is to diminish rivalry that would otherwise have occurred. In the absence of offsetting efficiencies, such settlements may be challenged as unlawful restraints of trade. *Cf. United States v. Singer Manufacturing Co.*, 374 U.S. 174 (1963) (cross-license agreement was part of broader combination to exclude competitors).

Pooling arrangements and the like generally need not be open to all who would like to join. Cross-licensing and pooling arrangements among parties that collectively possess market power may, under some circumstances, harm competition by significantly disadvantaging competitors. *Cf. Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*, 472 U.S. 284 (1985) (exclusion of a competitor from a purchasing cooperative not unlawful absent a showing of market power).

Another possible anticompetitive effect of pooling arrangements may occur when participation in the arrangement deters or discourages participants from engaging in research and development, thus retarding innovation. A pooling arrangement in which members grant licenses to each other for current and future technology at minimal cost may encourage free-

riding and reduce the incentives of its members to compete in their research and development efforts. *See generally United States v. Automobile Manufacturers Association*, 307 F. Supp. 617 (C.D. Cal 1969), *modified sub nom. United States v. Motor Vehicle Manufacturers Association*, 1982–83 Trade Cas. (CCH) ¶ 65,088 (C.D. Cal. 1982); *United States v. Manufacturers Aircraft Association*, 1976-1 Trade Cas. (CCH) ¶ 60,810 (S.D.N.Y. 1975). Such an arrangement is more likely to cause competitive problems where the arrangement includes a large fraction of the potential participants in research and development.

Example 9

Situation: As in Example 8, two of the leading manufacturers of a consumer electronic product hold patents that cover alternative circuit designs for the product. The manufacturers assign several of their patents to a separate corporation wholly owned by the two firms. That corporation licenses the right to use the circuit designs to other consumer product manufacturers and establishes the license royalties. In this example, however, the manufacturers assign to the separate corporation only patents that are blocking. None of the patents assigned to the corporation can be practiced without infringing a patent owned by the other firm.

Discussion: Unlike the previous example, the joint assignment of patent rights to the wholly owned corporation in this example can have procompetitive benefits in the use or dissemination of the technology. Because the manufacturers' patents are blocking, the manufacturers are not in a horizontal relationship with respect to those patents. Neither patent can be practiced without the right to a patent owned by the other firm, so the patents are not economic substitutes. (The pooling of patents also would not raise competitive problems in the relevant technology market if the pool involved complementary patents and enabled licensing of a package whose value exceeded the sum of its component patents.)

As in Example 8, the firms are horizontal competitors in the relevant goods market. In the absence of evidence suggesting that the joint assignment of patent rights is also contributing to coordinated pricing of the firms' final products, the Department would be unlikely to challenge this arrangement.

5.6 Grantbacks

A grantback is an arrangement under which a licensee agrees to extend to the licensor of intellectual property the right to use the licensee's improvements to the licensed technology. Grantbacks can have procompetitive effects, such as providing a means for the licensee and the licensor to share risks and rewarding the licensor for making possible further innovation based on or informed by the licensed technology. Such arrangements can both promote innovation in the first place and promote the subsequent licensing of the results of the innovation.

Grantbacks may adversely affect competition, however, if they substantially reduce the licensee's incentives to engage in research and development and limit rivalry in innovation

markets. In deciding whether to challenge a grantback, the Department will consider the extent to which, as compared with no license at all, the license with the grantback provision may diminish total research and development investment or lessen competition in innovation or technology markets.

5.7 Acquisition of intellectual property rights

The legality of transactions resulting in an actual or effective acquisition of intellectual property rights is analyzed under section 7 of the Clayton Act and sections 1 and 2 of the Sherman Act. *SCM Corp. v. Xerox Corp.*, 645 F.2d 1195, 1210 (2d Cir. 1981) (patents); *United States v. Columbia Pictures Corp.*, 189 F. Supp. 153, 183 (S.D.N.Y. 1960) (copyrights). The Department will analyze such transactions as acquisitions of assets just as it does other asset acquisitions. When a license is non-exclusive, the exclusivity is temporary, or the acquisition is otherwise structured to allow the parties freedom to compete independently in related products, the Department will take these aspects of the arrangement into account, as it does in the case of other asset acquisitions and joint ventures.

With respect to horizontal acquisitions, the Department will apply the analysis contained in the 1992 Horizontal Merger Guidelines. The Department will evaluate the effects of an acquisition of intellectual property in affected technology, innovation, and goods markets. As described in section 4 of the 1992 Horizontal Merger Guidelines, the Department takes into account integrative efficiencies that could not reasonably be achieved without the acquisition as wells as any anticompetitive effects of the acquisition from the lessening of competition among existing technologies or goods or from the lessening of competition to develop new technologies.

Example 10

Situation: Omega develops a new, patented pharmaceutical for the treatment of a particular disease. The only drug on the market approved for the treatment of this disease is sold by Zeta, which has invested large sums in advertising to achieve brand name recognition. Omega's patented drug has almost completed regulatory approval by the Food and Drug Administration. Omega has invested considerable sums in testing market acceptance for its new drug. However, rather than enter the market as a direct competitor of Zeta, Omega licenses to Zeta the exclusive right to manufacture and sell Omega's patented drug.

Discussion: Assuming that Zeta would manufacture and sell Omega's patented drug, the relationship of Omega and Zeta is in part vertical, because Zeta would be a customer of Omega in the technology market. However, their relationship is also horizontal in part, because Omega is a likely potential competitor of Zeta in the relevant goods market as well as in the relevant technology market. Although the vertical aspects of this arrangement pose no threat to competition in this example, the horizontal aspects would require further analysis. The Department would evaluate Zeta's acquisition of Omega's patent rights as an acquisition of the assets of a likely potential competitor, using the methodology described in the Department's merger guidelines. The Department would consider the impact of the acquisition on market concentration, other factors that affect the likelihood that competition would be affected by the acquisition, and possible efficiency defenses. In this example, Zeta's market position prior to the acquisition as the only seller of a drug for treatment of this disease makes it more likely that the acquisition would have anticompetitive effects.

6. Enforcement of invalid intellectual property rights

The Department may challenge the enforcement of invalid intellectual property rights as antitrust violations. The Supreme Court has held that enforcement of a patent obtained by fraud on the Patent and Trademark Office can violate section 2 of the Sherman Act if all the elements otherwise necessary to establish a section 2 monopolization charge are proved. *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965). Enforcement of a patent obtained by mere inequitable conduct before the Patent and Trademark Office, however, cannot be the basis of a section 2 claim, because inequitable conduct does not involve knowing and willful patent fraud. *Argus Chemical Corp. v. Fibre Glass-Evercoat Co.*, 812 F.2d 1381 (Fed. Cir. 1987). An objectively baseless infringement action, brought in bad faith, when the complainant knows the intellectual property right to be invalid, may violate section 2 of the Sherman Act. *See Professional Real Estate Investors, Inc. v. Columbia Pictures Industries, Inc.*, 113 S. Ct. 1920, 1928 (1993); *Handgards, Inc. v. Ethicon, Inc.*, 743 F.2d 1282, 1288–89 (9th Cir. 1984), *cert. denied*, 469 U.S. 1190 (1985) (patents); *Handgards, Inc. v. Ethicon, Inc.*, 601 F.2d 986, 992–96 (9th Cir. 1979), *cert. denied*, 444 U.S. 1025 (1980) (patents); *CVD, Inc. v. Raytheon Co.*, 769 F.2d 842 (1st Cir. 1985) (trade secrets).