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United States

1. Introduction

1. This paper outlines how the United States approaches IP licensing generally.¹ The paper first lays some groundwork by explaining the complementary nature of the U.S. intellectual property (IP) law and U.S. antitrust law. It then describes the analytical framework the U.S. Department of Justice (DOJ) and the U.S. Federal Trade Commission (FTC) (collectively “the Agencies”) apply to analyzing the licensing of patents, copyrights, and trade secrets.² The paper then provides some examples applying this framework to the analysis of common licensing restraints and arrangements.

2. Background on the Relationship Between U.S. IP Law and U.S. Antitrust Law

2.1. Overview of U.S. IP law

2. The Agencies’ Antitrust Guidelines for the Licensing of Intellectual Property focus on technology transfer and innovation-related issues that typically arise during the licensing of IP protected by patent, copyright, and trade secret law, and know-how. This section describes those intellectual property doctrines.

3. To gain patent protection, the invention must be novel, nonobvious, useful, and sufficiently disclosed.³ A patent grants an inventor or assignee a set of rights to an invention for a limited period.⁴ In particular, a United States patent grants the exclusive right to make, use, offer to sell, or sell the patented invention within the United States, and import the invention into the United States. This exclusive right allows a patent holder to sue for infringement anyone who impermissibly uses the patented invention.⁵ If the patent holder proves infringement, it is entitled to damages and may be entitled to injunctive relief and reasonable attorneys’ fees.⁶

¹ The United States previously submitted papers to the Competition Committee discussing U.S. competition policy concerning standard-setting activities in June 2010 and December 2014. *See* Competitive Aspects of Collective Standard Setting (DAF/COMP/WP2/WD(2010)28); Competitive Aspects of Collective Standard Setting (DAF/COMP/WP2/WD(2010)28). These papers discussed the leading U.S. Supreme Court decisions in the area of standard setting, enforcement decisions by the U.S. Department of Justice and the U.S. Federal Trade Commission.

² The Agencies first articulated this framework in the 1995 DOJ-FTC Antitrust Guidelines for the Licensing of Intellectual Property. The guidelines were updated in 2017.

³ 35 U.S.C. §§ 101-103, 112.

⁴ *See, e.g.*, 35 U.S.C. § 154(a)(2), (c)(1); *id.* § 173. U.S. patent rights are within the exclusive jurisdiction of federal law.

⁵ 35 U.S.C. § 271.

⁶ 35 U.S.C. §§ 283-285.

4. In the United States, there are three types of patents: (1) utility patents; (2) plant patents; and (3) design patents.⁷ Although the Agencies' antitrust analysis most commonly focuses on utility patents, the IP Guidelines also apply to plant and design patents.

5. Copyrights protect original works of authorship fixed in a tangible medium of expression, including published and unpublished literary, dramatic, musical, and artistic works.⁸ "Original" in this context means that the author created the work independently and that it contains at least a minimal degree of creativity.⁹ Unlike a patent, which protects an invention not only from copying but also from subsequent independent creation by others, a copyright does not preclude others from independently creating a similar expression.

6. Trade secret protection applies to information whose economic value depends on it not being generally known. Trade secret protection relies on the rights holder's efforts to maintain secrecy and has no fixed term. As with copyright, trade secret law does not restrict independent creation by third parties, in contrast to patent protection. U.S. patent law and copyright law are solely federal doctrines, while trade secret law is predominantly a creature of state law. However, the United States recently enacted a federal law creating a federal private cause of action for the misappropriation of trade secrets.¹⁰

7. Know-how is a general term that refers to the knowledge or expertise necessary to run manufacturing processes or other business requirements. It often is licensed together with trade secrets or patents.¹¹

8. Although each of these doctrines has a different purpose, each creates intangible rights that can promote innovation and facilitate technology transfer through their licensure.

2.2. Overview of U.S. antitrust law

9. In the United States, DOJ and FTC share a competition mission to enforce the antitrust laws. The Agencies' antitrust enforcement focuses on concerted action, exclusionary unilateral action, and merger review. The three core U.S. federal antitrust laws are the Sherman Act, the Clayton Act, and the FTC Act, which is enforced solely by FTC and prohibits unfair methods of competition as well as unfair or deceptive acts and

⁷ Utility patents address new and useful processes, machines, compositions of matter, or useful improvements thereof. 35 U.S.C. § 101. Plant patents cover certain new plant varieties that the patent applicant has discovered and reproduced. *Id.* § 161. Utility and plant patents last for twenty years, measured from the date the patent application was filed. *Id.* §§ 154-157, 163. Patents are effective over this entire term unless there is: (1) an adverse proceeding by the United States Patent and Trademark Office; (2) a judicial finding of invalidity; or (3) a judicial finding of unenforceability due to inequitable conduct. Design patents cover new, original, and ornamental designs for physical goods, and last for fourteen years from the date the patent was granted. *Id.* §§ 171-173.

⁸ 17 U.S.C. § 102.

⁹ See *Feist Publ'ns v. Rural Tel. Serv.*, 499 U.S. 340, 345 (1991).

¹⁰ See *Defend Trade Secrets Act of 2016*, Pub. L. No. 114-153, § 2(a), 130 Stat. 376, 376-80 (codified at 18 U.S.C. § 1836(b)).

¹¹ See, e.g., *Verson Corp. v. Verson Int'l Grp.*, 899 F. Supp. 358 (N.D. Ill. 1995) (addressing know-how licensing dispute.).

practices. Only DOJ is empowered under the Sherman Act to bring criminal enforcement actions.

10. Section 1 of the Sherman Act governs concerted action.¹² It prohibits combinations, contracts, or conspiracies that unreasonably restrain trade in interstate or foreign commerce. The vast majority of IP licensing activity is evaluated under the rule of reason, although some horizontal restraints—such as naked price fixing or market allocation agreements among competitors—are treated as per se unlawful.¹³ Section 2 of the Sherman Act governs unilateral conduct.¹⁴ It prohibits monopolization, which requires monopoly power in a relevant market, and the willful acquisition or maintenance of monopoly power through anticompetitive conduct. It also prohibits attempted monopolization. U.S. law does not condemn the possession of monopoly power that results from a superior product, business acumen, or historical accident in the absence of predatory or exclusionary conduct.¹⁵ As discussed below, the IP Guidelines do not presume that intellectual property creates market power.¹⁶

11. The Clayton Act prohibits mergers and acquisitions that may substantially lessen competition.¹⁷ The Agencies will apply merger analysis to “an outright sale by an intellectual property owner of all of its rights to that intellectual property and to a transaction in which a person obtains through grant, sale, or other transfer an exclusive license for intellectual property (i.e., a license that precludes all other persons, including the licensor, from using the licensed intellectual property).”¹⁸ The FTC and the DOJ typically would analyze such a transaction under the framework described in the DOJ and FTC Horizontal Merger Guidelines (2010).¹⁹

2.3. Antitrust and IP laws work together to promote dynamic competition

12. Innovation drives economic growth and benefits consumers by bringing to market new ideas, products, and services that solve problems and improve lives. Innovation and IP rights are vital to the U.S. economy. The U.S. government recently reported that IP-intensive industries support at least 45 million U.S. jobs (roughly 30 percent of all the jobs

¹² 15 U.S.C. § 1.

¹³ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY § 3.3 (2017) (hereinafter IP GUIDELINES), <https://www.justice.gov/atr/IPguidelines/download>.

¹⁴ 15 U.S.C. § 2.

¹⁵ *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

¹⁶ IP GUIDELINES, *supra* note 13, § 2.

¹⁷ 15 U.S.C. §§ 18, 45.

¹⁸ IP GUIDELINES, *supra* note 13, § 5.7 n.85 (noting that the Agencies “may also apply a merger analysis to a transaction involving a license that does not fall within the traditional definition of an exclusive license but in substance transfers intellectual property rights and raises the same potential antitrust concern—i.e., the transaction’s effect may be to substantially lessen competition in a relevant market.”); *see also id.* § 3.4.

¹⁹ *See* U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES (2010), <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>.

in the United States) and contribute more than \$6 trillion dollars to, or 38.2 percent of, U.S. gross domestic product. IP is used in virtually every segment of the U.S. economy.²⁰

13. Historically, firms engaged in their own research and development (R&D) to bring their products to market under a “closed innovation” strategy. Recognizing the benefits of acquiring innovation developed by others for use in their own products and services, firms have increasingly embraced “open innovation” strategies. Open innovation facilitates a division of labor between those who focus on R&D and those who focus on production, which can increase the pace of innovation and result in broader, faster distribution of new products to consumers. Open innovation allows firms to leverage external innovation to support their own development. This model can involve collaboration through joint venture agreements, or technology transfer through licensing or acquisition agreements.²¹

14. IP rights promote innovation and technology transfer in several ways. Having the ability to obtain enforceable rights encourages individuals and firms to take risks and invest in research and development to create new products and services and improve quality. IP rights make it easier for parties to receive compensation for the use of their innovation and create a marketplace for ideas. IP also guards innovation against the risks inherent in complex development processes. The patent system, for example, prevents others from making, using, or selling a patented invention for a fixed term, thus protecting against copying that might otherwise drive down prices or otherwise discourage new research and development. The exclusive rights granted by the patent system also permit patent holders to license their patents on an exclusive or non-exclusive basis, encouraging complementary investments and innovation to commercialize the patented invention. The patent system further promotes innovation by requiring public disclosure of patented inventions, which allows follow-on invention based on the disclosed information.

15. Antitrust law likewise promotes innovation. Dynamic competition based on innovation, i.e., competition based on the introduction of new or improved products or services, is at the heart of many industries. Antitrust law protects market-based competition by condemning unreasonable restraints of trade and other conduct that harms competition. Competition between firms vying to succeed in the marketplace can lower prices, improve the quality of goods or services, increase the productivity of firms, spur the introduction of new products, and otherwise motivate innovation. Antitrust law based on sound economics safeguards this competitive process and aims to prevent anticompetitive or exclusionary practices that undermine consumer welfare.²²

²⁰ U.S. DEP’T OF COMMERCE, INTELLECTUAL PROPERTY AND THE U.S. ECONOMY: 2016 UPDATE (2016), <https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf>.

²¹ U.S. FED. TRADE COMM’N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 33-34 (2011), <https://www.ftc.gov/sites/default/files/documents/reports/evolving-ip-marketplace-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307patentreport.pdf>.

²² Dynamic competition refers to successive rounds of competition, which can maximize what economists refer to as dynamic efficiency. “Once a product or standard achieves wide acceptance, it becomes more or less entrenched. Competition in such industries is ‘for the field’ rather than ‘within the field.’ In technologically dynamic markets, however, such entrenchment may be temporary, because innovation may alter the field altogether.” *United States v. Microsoft Corp.*, 253 F.3d 34, 49–50 (D.C. Cir. 2001) (first quoting Harold Demsetz, *Why Regulate Utilities?*, 11 J.L. & ECON. 55, 57 & n.7 (1968); and then citing JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM AND

16. The Agencies have long recognized that the policies of the patent laws and antitrust laws are aligned in their mutual aim to foster innovation that creates dynamic competition.²³ The U.S. courts have likewise explained that the “aims and objectives of patent and antitrust laws . . . are actually complementary, as both are aimed at encouraging innovation, industry and competition.”²⁴ Ultimately, IP rights should not be viewed as solely intended to protect their owners *from* competition; rather, IP rights should be seen principally as encouraging firms to engage *in* competition, particularly competition that involves risk and long-term investment.

2.4. The importance of licensing freedom

17. The United States agencies have long held the view that unilateral refusals to license are rarely, if ever, anticompetitive. Indeed, the agencies have consistently expressed the view that “antitrust liability for mere unilateral, unconditional refusals to license patents will not play a meaningful part in the interface between patent rights and antitrust protections.”²⁵

18. “The antitrust laws generally do not impose liability upon a firm for a unilateral refusal to assist its competitors,” such as a refusal to license intellectual property, “in part because doing so may undermine incentives for investment and innovation.”²⁶ Potential innovators may be less likely to fund necessary research and development, if the government later decides that this R&D must be shared with others who did not make similar investments. In addition, competitors may have less incentive to develop competing technologies if they believe that the first-mover may be compelled to license its intellectual property. Competitors may, instead, wait for others to undertake risky and expensive research. Recognizing these risks, U.S. courts have generally rejected the notion that an IP owner has a duty to deal with competitors. The U.S. Supreme Court has not recognized an “essential facility” doctrine in the IP (or any other) context.²⁷

DEMOCRACY 81–90 (Harper Perennial 1976) (1942)). “Rapid technological change leads to markets in which ‘firms compete through innovation for temporary market dominance, from which they may be displaced by the next wave of product advancements.’” *Id.* (quoting Howard A. Shelanski & J. Gregory Sidak, *Antitrust Divestiture in Network Industries*, 68 U. CHI. L. REV. 1, 11–12 (2001) (“discussing Schumpeterian competition, which proceeds ‘sequentially over time rather than simultaneously across a market’”).

²³ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 1 (2007) (hereinafter 2007 IP REPORT), <http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf>.

²⁴ *Atari Games Corp. v. Nintendo of Am., Inc.*, 897 F.2d 1572, 1576 (Fed. Cir. 1990).

²⁵ 2007 IP REPORT, *supra* note 23, at 27–28, 32.

²⁶ IP GUIDELINES, *supra* note 13 (citing *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407–08 (2004); *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919); 2007 IP Report, *supra* note 23, at 27–28).

²⁷ *See Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 411 (2004).

19. A related point is that lawful monopolists are free to charge monopoly prices. The prospect of earning monopoly profits can encourage innovation from rivals and new entrants. In the case of IP royalties, prices are best set by bilateral agreement between licensors that choose to license their IP and licensees that want to use the claimed invention.²⁸

20. Competition enforcers who set licensing rates, like other forms of government price control, can undermine the benefits of market-based pricing and lead to the misallocation of resources. For these reasons, U.S. antitrust law does not bar “excessive pricing” as a standalone theory of harm.

3. The 2017 DOJ-FTC Antitrust Guidelines for the Licensing of Intellectual Property

21. The Antitrust Guidelines for the Licensing of Intellectual Property (Antitrust-IP Guidelines) have been critical to the Agencies’ investigative and enforcement efforts since they were issued in 1995. In lieu of rigid rules and prohibitions, the Antitrust-IP Guidelines apply a flexible effects-based analysis to most licensing activity. The Agencies updated these Guidelines in 2017, continuing to rely on the sound principles from the 1995 Antitrust-IP Guidelines.²⁹

22. The 2017 update sought to modernize the Antitrust-IP Guidelines to reflect legal developments in U.S. IP and antitrust laws since 1995. The update accounts for subsequent statutory changes to U.S. IP law as well as U.S. Supreme Court antitrust decisions. The 2017 Antitrust-IP Guidelines also include updated references to agency reports, recent case law, DOJ business review letters, and relevant enforcement actions.

3.1. The Antitrust-IP Guidelines are rooted in three foundational principles

23. Like the 1995 Antitrust-IP Guidelines, the 2017 Antitrust-IP Guidelines start from the proposition that U.S. IP law and U.S. antitrust law share the common purpose of promoting innovation and enhancing consumer welfare. The Antitrust-IP Guidelines set out three core principles:

- The Agencies apply the same general antitrust analysis to IP as to other forms of property. The Agencies do not use specialized antitrust rules to analyze activity involving IP rights and the exercise of IP rights is neither particularly free from scrutiny under the antitrust laws, nor particularly suspect under them. Similar to real property, IP creates legitimate rights to exclude. At the same time, IP has unique characteristics that differ from other forms of property. The Agencies take these unique characteristics into account when conducting their standard antitrust analysis.
- The Agencies do not presume that an IP right confers market power on its holder. Even though a patent confers the right to exclude, often there will be sufficient actual or potential close substitutes to prevent the exercise of market

²⁸ Where bilateral negotiation to agreed-upon terms fail, U.S. courts are empowered to award, “no less than a reasonable royalty,” upon finding infringement of a valid and enforceable patent claim. 35 U.S.C. § 281.

²⁹ IP GUIDELINES, *supra* note 13.

power by the patent holder. Moreover, even if an IP right does confer market power—which must be established through a fact-based inquiry—that market power is not, by itself, illegal. When the Antitrust-IP Guidelines first issued in 1995, the Agencies recognized that whether IP presumptively conferred market power was unsettled in the courts. In 2006, however, the U.S. Supreme Court adopted the Agencies’ view that IP does not presumptively confer market power.³⁰

- The Agencies recognize that IP licensing agreements are generally procompetitive. IP is often one component among many in a product or process, which derives its value from its combination with complementary inputs. Licensing, cross-licensing, and other transfers of IP can facilitate the efficient integration of technology and production facilities needed to commercialize a new product or service. Licensing may also provide incentives to innovate by providing additional avenues through which innovators can obtain returns on their investments.

3.2. General analytical framework

24. IP licensing arrangements typically enhance consumer welfare and promote competition. Licensing arrangements can promote efficiency-enhancing integration of economic activity by facilitating the combination of the licensor’s IP with complementary factors of production owned by the licensee. Restraints in licensing agreements may enhance this integration by, for example, aligning the incentives of the licensor and the licensees to promote the development and dissemination of the licensed technology, or by reducing transaction costs. On occasion, antitrust concerns may arise nonetheless in the context of licensing. The Agencies’ fact-specific analysis focuses on the actual or likely effects of the licensing terms and conditions.

25. The vast majority of IP licensing arrangements are analyzed under the rule of reason. This analysis considers whether the restraint is likely to have anticompetitive effects and, if so, whether the restraint is reasonably necessary to achieve procompetitive benefits that outweigh the anticompetitive effects. This effects-based analysis typically requires looking not only at the restraint itself, but also at the horizontal or vertical relationship between the parties, the existence of market power, the concentration of the market, the responsiveness of the market to supply and demand changes, the ease of entry by rivals, and the potential impact on incentives to innovate in the future. The focus is on harm to competition, not on harm to any individual competitor. Such an analysis should avoid rigid rules that may prohibit procompetitive licensing activities. The Agencies’ flexible approach, by contrast, focuses on the ultimate question of whether a practice harms competition.

26. When conducting a rule of reason analysis, the Agencies seek to identify one or more relevant markets in which anticompetitive effects are likely to occur. The 2017 Antitrust-IP Guidelines apply a more open-ended approach to market definition than the

³⁰ See *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 42, 45-46 (2006) (“Congress, the antitrust enforcement agencies, and most economists have all reached the conclusion that a patent does not necessarily confer market power upon the patentee. Today, we reach the same conclusion”); see also *Mediacom Commc’ns Corp. v. Sinclair Broad. Grp.*, 460 F. Supp. 2d 1012, 1027-28 (S.D. Iowa 2006) (applying *Independent Ink* to copyright).

1995 Antitrust-IP Guidelines, clarifying that the Agencies may consider the effects of a licensing arrangement on more than one type of market, depending on the facts.

27. A rule of reason analysis involving IP licensing issues also requires careful evaluation of the parties' relationship to each other, considering whether the parties would have been actual or potential competitors in the absence of the agreement. These relationships often are complex, and IP licensing arrangements may have both horizontal and vertical components. Parties may be horizontal competitors in one market (e.g., a goods market) and in a vertical relationship in another (e.g., a technology market). Where a licensor and licensee are also actual or potential competitors, there may be a horizontal relationship between the parties, although this relationship does not automatically make a licensing arrangement anticompetitive. Conversely, licenses that relate to complementary activities may involve a vertical relationship; however, it is possible that even a purely vertical licensing relationship may have anticompetitive effects. Properly evaluating the parties' relationship allows the Agencies to determine more accurately whether competition may be lessened by a licensing agreement.

28. A detailed analysis of market power and procompetitive justifications for the restraint is not always necessary. The Agencies and U.S. courts treat a limited number of restraints—naked price fixing, bid rigging, naked output restrictions, market division by horizontal competitors, and certain group boycotts—as per se unlawful without an elaborate inquiry into the restraint's likely competitive effect. Similarly, if the Agencies conclude that a restraint has no likely anticompetitive effects, the restraint may be deemed reasonable without a full analysis of market power or procompetitive justifications.

3.3. Applying the Antitrust-IP Guidelines to specific arrangements

29. Restrictions contained in IP licenses, including field of use, territorial, or other types of limitations, may be procompetitive if they allow the licensor to exploit its property as efficiently as possible. For example, various forms of exclusivity can be used to create incentives for the licensee to invest in the commercialization and distribution of products embodying the licensed IP. Without protections against “free-riding” by the licensor or other licensees who may seek to take advantage of the licensee's investments rather than bear the cost of making such investments themselves, a licensee may be unwilling to undertake the investments in the first place. Alternatively, licensing restrictions can be used to increase the licensor's incentive to make its IP available to others by allowing it to retain the use of its technology in certain market areas that it prefers to keep to itself while licensing the use of its technology in other areas. The following subsections apply the general principles from the Antitrust-IP Guidelines to the rule of reason analysis of common licensing restraints and arrangements. The discussion below is not intended as an exhaustive description of practices that could raise competition concerns, and the analytical framework presented is flexible enough to apply to other types of licensing restraints and arrangements.

- **Field of use/territorial restraints:** A licensor may grant less than the total patent right based on field-of-use or territory. Licenses limited in scope in this manner are often procompetitive. For example, these types of licenses may enable the licensor to price more efficiently and promote efficient commercialization of its IP. They can increase the licensor's incentive to license broadly by providing a mechanism through which the licensor can keep for itself the use of its technology in selected applications while licensing out other uses. They can also create incentives for the licensee to invest in the technology by protecting

it from free-riding by the licensor or other licensees. Licensing restraints that are used to allocate territories or divide fields of use could violate the antitrust laws, however, if they were entered into by actual or potential competitors with the effect of restricting access to competing technology, preventing licensees from developing their own competing technologies, or facilitating market allocation or price-fixing for any product or service supplied by the licensees. Only when the licensing agreement impedes competition among firms that are actual or potential competitors does the potential for competitive harm exist.

- **Price maintenance:** Resale price maintenance (RPM) typically refers to a vertical pricing arrangement in which a manufacturer requires its resellers to sell its products at or above a specified price. In the IP context, an analogous arrangement can occur where a licensor conditions a license on the resale price of products incorporating its technology. The U.S. Supreme Court's decision in *Leegin*, which held that minimum RPM agreements should be evaluated under the rule of reason, overturned a nearly century-old view that such arrangements were per se illegal.³¹ Although *Leegin* arose in the context of resale price restrictions on goods sold by retailers, the Agencies apply the *Leegin* analysis to pricing restrictions in IP licensing agreements. Accordingly, the Agencies analyze vertical price restrictions in licensing agreements under the rule of reason.
- **Tying arrangements:** A tying arrangement occurs where a party agrees to sell one product (the "tying product") conditioned on the purchase of a different product (the "tied product"). Package licensing—the licensing of multiple IP items together—may be a form of tying if the licensing of one IP right is conditioned on the licensing of a separate IP right. Because tying arrangements (including package licensing) can result in procompetitive benefits and significant efficiencies, the Agencies apply a rule of reason analysis to tying arrangements. The Agencies would be likely to challenge a tying arrangement if: (1) the seller has market power in the market for the tying product, (2) the arrangement has an adverse effect on competition in the relevant market for the tying product or the tied product, and (3) the efficiency justifications for the arrangement do not outweigh the anticompetitive effects.
- **Exclusive licenses:** Fully exclusive or partially exclusive licenses (including exclusive field-of-use or exclusive territorial licenses) restrict the right of the licensor to license to others and possibly also to use the technology itself. The Agencies note that the antitrust principles that apply to a licensor's grant of exclusivity to and among its licensees where there is a vertical relationship between the licensor and its licensee(s) are similar to those that apply to comparable vertical restraints, such as exclusive territories, outside the IP licensing context. The use of restrictions that might be anticompetitive in other contexts may be justified in licenses involving IP based on the unique characteristics of IP, such as the fact that IP may be misappropriated more easily than other forms of property. Exclusive licenses generally only raise antitrust concerns if there is a horizontal relationship among licensors, among

³¹ See *Leegin Creative Leather Prod., Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007). The U.S. Supreme Court has also clarified that *maximum* retail price restrictions should be evaluated under the rule of reason. See *State Oil Co. v. Khan*, 522 U.S. 3 (1997).

licensees, or between the licensor and its licensee(s). Examples of arrangements involving exclusive licensing that may give rise to antitrust concerns include cross-licensing by competitors that collectively possess market power (including pooling arrangements discussed in paragraph 32), grantbacks, and acquisitions of IP rights.

- Exclusive dealing: An exclusive dealing arrangement prevents or restrains the licensee from licensing, selling, distributing, or using competing IP, technology, or products. The arrangement may be explicit or be the result of incentives contained in the license. Exclusive dealing arrangements can have procompetitive benefits including encouraging licensees to invest in the commercialization, distribution, and improvement of licensed technology. Exclusivity provisions can also allow the licensor to exploit its IP efficiently by licensing only to licensees that are investing in the technology. Under certain circumstances, however, such arrangements can anticompetitively foreclose access to or increase the costs of obtaining important inputs or possibly even facilitate coordination to raise price or reduce output. The likelihood that exclusive dealing may have anticompetitive effects is related to, among other things, the degree of foreclosure in the relevant market, the duration of the arrangement, and other characteristics of the input and output markets, including concentration, ease of entry, and the responsiveness of supply and demand to changes in price in the relevant market.
- Cross-licensing and pooling: Cross-licensing and pooling arrangements are agreements of two or more IP owners to license one another or third parties. These arrangements may provide procompetitive benefits by integrating complementary technologies, reducing transaction costs, clearing blocking positions, and avoiding (or settling) costly infringement litigation. These types of arrangements can also have anticompetitive effects under certain circumstances. Patent pools can reduce competition if they include patents that otherwise would compete for licensees. The close cooperation necessary for a patent pool can provide a forum for price fixing, collusion, and classic cartel behavior. Patent pools also can foreclose innovation and entrench a dominant technology if they behave in a way that discourages participants from engaging in research and development.³² Although pooling arrangements generally need not be open to all, exclusion from cross-licensing and pooling arrangements among parties that collectively possess market power may, under some circumstances, harm competition. Safeguards that may reduce the risk of reducing competition among technologies include limiting the pool to complements and protecting against downstream coordination by limiting access to competitively sensitive information. Safeguards that may reduce the risk of foreclosing innovation include: permitting pool members to license individually outside of the pool structure so that competitors can choose to innovate around some patents in the pool while licensing others, limiting the

³² For example, a pooling arrangement that requires members to grant licenses to each other for current and future technology at minimal price may reduce the incentives of its members to engage in research and development because members of the pool have to share their successful research and development and each of the members can free ride on the accomplishments of other pool members.

scope of grantbacks, clarifying which patents are in the pool, and excluding expired and invalid patents from the pool.

- **Grantbacks**: Grantbacks can provide incentives for initial innovators to allow follow-on innovation by others. Under a grantback arrangement, the licensee agrees to give the licensor the right to use the licensee's improvements to the licensed technology. A grantback may be needed, for example, to induce licensing if the licensor is concerned that it would be unable to compete without access to improvements made by the licensee to the licensor's technology. Such arrangements can promote further innovation by the licensee that is based on, or informed by, the licensed technology and facilitate subsequent licensing of this follow-on innovation by the licensor or licensee. Anticompetitive effects are possible if the grantback is designed in a way that substantially reduces the licensee's incentives to engage in research and development. Non-exclusive grantbacks tailored to the scope of the licensed patent are unlikely to raise competition concerns. Exclusive grantbacks are more likely to create competition concerns than non-exclusive grantbacks because they place greater limitations on the use of the licensee's improvements; however, an exclusive grantback that permits the licensee to continue to use its own follow-on technology, or one where the licensor is the only likely user of the licensee's technology may not, on balance, harm competition.
- **Post-expiration royalties**: Licensing agreements with royalty payments on patent uses post patent expiration may dampen competition between licensee and licensor. Such licensing terms, absent an efficiency rationale, may be anticompetitive under a rule of reason analysis. Under *Kimble v. Marvel Entertainment*, the U.S. Supreme Court precluded patent holders from receiving royalties for using an invention after the patent has expired, but the Court distinguished cases where the parties agree to defer payments for pre-expiration use of a patent into the post-expiration period.³³
- **Enforcement of invalid IP rights**: Under certain circumstances, the Agencies may challenge the enforcement of invalid IP rights as antitrust violations. In *Walker Process*, the Supreme Court held that a patent holder may be subject to antitrust liability in a situation where the patent was obtained by knowing and willful fraud on the patent office and all the other necessary elements for a Sherman Act Section 2 charge are present.³⁴

4. Preserving Competition to Innovate Through Merger Enforcement

30. Consumers benefit when companies compete against one another to develop innovative new products and services. The Agencies seek to preserve incentives to innovate

³³ See *Kimble v. Marvel Entm't, LLC*, 135 S. Ct. 2401, 2408 (2015).

³⁴ See *Walker Process Equip., Inc. v. Food Mach. & Chem. Corp.*, 382 U.S. 172, 176-77 (1965); see also *Michael Anthony Jewelers, Inc. v. Peacock Jewelry, Inc.*, 795 F. Supp. 639, 647 (S.D.N.Y. 1992) (holding that the enforcement of copyrights obtained by fraud on the Copyright Office could similarly violate antitrust law).

through their merger enforcement work.³⁵ Where a transaction is likely to harm competition to innovate, the Agencies will bring suit to block the transaction or seek divestitures, including divestiture of IP and R&D functions, to maintain incentives to innovate. For example, in *United States v. Bayer AG and Monsanto Company*,³⁶ DOJ sought to preserve competition to innovate in agricultural product markets by requiring divestiture of certain IP and research capabilities, including “pipeline” R&D projects. Similarly, in *U.S. v. Thales S.A. and Gemalto N.V.*,³⁷ the consent decrees required divestiture of certain IP and research capabilities for products under development to ensure that the structure of the market post-transaction would continue to promote the race to innovate in general purpose hardware security modules. Finally, the FTC routinely requires the divestiture of all rights and assets, including IP rights and technical know-how, even though one (or both) of the merging parties does not have a commercial product but is likely to provide important competition in the near future as a result of its product development efforts. For example, to resolve competitive concerns in *Teva/Allergan*, the FTC required respondents to divest intellectual property and other assets to prevent harm to future competition involving pipeline pharmaceutical products.³⁸

5. Remedies Involving IP Licensing

31. If a jurisdiction finds harm to competition, it is important that the remedy be tailored to address the identified harm to the jurisdiction’s consumers and not be expanded to address other policy goals, e.g., to further industrial policy or to advantage domestic competitors. Crafting tailored remedies is particularly important in the IP context as more jurisdictions are active in this area.

32. For example, in *U.S. v. Bazaarvoice, Inc.*,³⁹ DOJ successfully challenged at trial and unwound Bazaarvoice’s consummated acquisition of its primary competitor in the market for ratings and reviews (R&R) platforms. The post-trial remedy entered by the court restored the competition lost through the merger so that online retailers and manufacturers would continue to benefit from a competitive market. Bazaarvoice agreed to divest all the tangible and intangible assets, including IP rights, that it acquired when it purchased PowerReviews. It further agreed to license the right to sell Bazaarvoice’s syndication

³⁵ As discussed in our prior submission on Non-price Effects of Mergers, the Agencies consider whether a merger is likely to diminish innovation competition by reducing the incentive for the merged firm to continue with an existing product development effort or initiate the development of new products. OECD, NON-PRICE EFFECTS OF MERGERS – NOTE BY THE UNITED STATES 8 (DAF/COMP/WD(2018)45), https://www.ftc.gov/system/files/attachments/us-submissions-oecd-2010-present-other-international-competition-fora/non-price_effects_united_states.pdf.

³⁶ The filings in this case are available at <https://www.justice.gov/atr/case/us-v-bayer-ag-and-monsanto-company>.

³⁷ The filings in this case are available at <https://www.justice.gov/atr/case/us-v-thales-sa-and-gemalto-nv>.

³⁸ *In re* Teva Pharmaceutical Industries Ltd. and Allergan plc, C-4589 (complaint issued Sept. 7, 2016) (Analysis of Agreement Containing Consent Order to Aid to Public Comment), <https://www.ftc.gov/system/files/documents/cases/160727tevaallergananalysis.pdf>.

³⁹ The filings in this case are available at <https://www.justice.gov/atr/case/us-v-bazaarvoice-inc>.

services to the divestiture asset acquirer's customers, not enforce its trade secret restrictions on current and past employees who were hired by the divestiture acquirer, and provide at no cost to the divestiture acquirer an irrevocable, fully paid-up perpetual and nonexclusive license to all Bazaarvoice R&R platform patents and patent applications issued or filed at the time of the divestiture. The licensing arrangement was needed to ensure that Bazaarvoice would not engage in strategic behavior to raise the divestiture acquirer's costs through litigation related to Bazaarvoice and PowerReviews IP that was commingled through the consummated merger.

33. On occasion, the agencies have imposed licensing requirements in order to effectuate structural remedies. For instance, in *Honeywell International Inc./Intermec*,⁴⁰ the FTC required Honeywell to license U.S. patents critical to the manufacture of two-dimensional (2D) scan engines to preserve competition in the United States. The divestiture buyer, Datalogic, sold products that incorporated 2D scan engines in other countries but the Honeywell patents were a barrier to Datalogic marketing these products in the United States. Requiring Honeywell to license the necessary intellectual property to Datalogic removed this intellectual property barrier and facilitated the entry of Datalogic into the United States market.

⁴⁰ *In re* Honeywell International Inc., C-4418 (complaint issued Sept. 13, 2013), <https://www.ftc.gov/enforcement/cases-proceedings/131-0070/honeywell-international-inc-matter>.