
By M. Howard Morse

Introduction

The Department of Justice and Federal Trade Commission have provided much useful guidance to businesses and their counselors setting up and managing patent pools in recent years. We now all look regularly to the 1995 DOJ/FTC Antitrust Guidelines for the Licensing of Intellectual Property,¹ DOJ Business Review Letters on the MPEG and DVD pools,² and FTC enforcement actions, most notably In the Matter of Summit Technology, Inc.³ In light of recent experience, the time may be ripe for further clarification of the Guidelines or other pronouncements to refine policy in particular areas. Moreover, additional enforcement actions may be warranted in certain factual circumstances to protect the public interest in competition. This article summarizes current governing legal principles and then returns to those areas that may warrant further clarification or enforcement action.

Most discussions of antitrust rules applicable to cross-licenses and pooling arrangements begin with a definition. Some distinguish cross-licensing, that is the inter-change of intellectual property rights directly between two or more persons, and patent pools, described as the aggregation of intellectual property rights, whether transferred directly by patentee to licensee or through some medium, such as a joint venture, set up specifically to administer the pool.⁴ The IP Guidelines explain simply that “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.” IP Guidelines ¶ 5.5.

It is also helpful at the outset to distinguish competing, complementary and blocking patents. Competing patents are generally viewed as substitutes for each other, where there are separate patents covering alternative processes for manufacturing a product, for example. Complementary patents cover technologies that may be used together and are not substitutes for each other. One patent blocks another if it cannot be practiced without infringing on the basic patent.⁵

One of the bedrock principles of the IP Guidelines is that intellectual property licensing allows firms to combine complementary factors of production, including various items of intellectual property, and is generally procompetitive. IP Guidelines ¶¶ 2.0, 2.3. The Guidelines explain that such arrangements can lead to more efficient exploitation of intellectual property, benefiting consumers through the reduction of costs and the introduction of new products. By increasing expected returns from intellectual property, licensing may also increase the incentive for its creation and thus promotes greater investment in research and development.

Field of use, territorial, and other limitations on intellectual property licenses once condemned,⁶ are now recognized to generally serve procompetitive ends by allowing a licensor to exploit its property as efficiently and effectively as possible. By protecting a licensor or licensee from free-riding, these various forms of exclusivity may increase the

¹ Mr. Morse is a partner with Drinker, Biddle & Reath LLP in Washington, D.C. and co-chair of the firm’s Antitrust Practice Group. He is also Chair of the Intellectual Property Committee of the ABA Section of Antitrust Law. Prior to joining Drinker Biddle & Reath, Mr. Morse was Assistant Director of the Bureau of Competition at the Federal Trade Commission. The opinions expressed in this article do not represent the views of Mr. Morse’s clients or other attorneys in Mr. Morse’s firm. An earlier version of this article was presented as testimony to the FTC/DOJ Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy on April 17, 2002.
licensor’s incentive to license and may give a licensee the incentive to invest in the commercialization and distribution of products embodying the licensed intellectual property and to develop additional applications. IP Guidelines 2.3.

The Guidelines recognize as a fundamental matter that antitrust concerns most often arise when a licensing arrangement limits competition among entities that “would have been actual or likely potential competitors in a relevant market in the absence of the license.” That is, antitrust concerns are most common where a licensor and licensee are in a “horizontal relationship” and combine patents that are complementary or competitive. IP Guidelines ¶ 3.1. The Guidelines recognize that license restrictions may also harm competition, however, by foreclosing access to, or significantly raising the price of, an important input, or by facilitating coordination to increase price or reduce output. Id. Thus, a purely vertical relationship does not assure that there are no anticompetitive effects. IP Guidelines ¶ 3.3.

While naked price fixing, output restraints, and market division among horizontal competitors, group boycotts and resale price maintenance in license agreements will be condemned as per se unlawful as they would in other agreements, most license agreements are evaluated under the rule of reason. The DOJ and FTC will inquire whether a restraint is likely to have anticompetitive effects and, if so, whether the restraint is reasonably necessary to achieve procompetitive benefits that outweigh those anticompetitive effects or whether the parties could have achieved similar efficiencies by significantly less restrictive means. IP Guidelines ¶¶ 3.4, 4.2.

**Supreme Court Precedent**

Antitrust analysis of patent pools necessarily starts with Justice Brandeis’ seminal opinion in *Standard Oil Co. v. United States*, 283 U.S. 163, 170-77 (1931). The Supreme Court there upheld a patent pool among competing oil companies under the rule of reason as necessary for each party to practice its own inventions since the patents were blocking. The Court rejected the government’s argument that the pool eliminated competition between patent owners in the independent licensing of their patents and thereby increased the manufacturing costs of gasoline.

The *Standard Oil* Court reasoned that settling conflicting patent claims by pooling can be economically beneficial and is often necessary for technological advancement:

> [a]n interchange of patent rights and a division of royalties according to the value attributed by the parties to their respective patent claims is frequently necessary if technical advancement is not to be blocked by threatened litigation.

The Court concluded patent pools are necessary for technological progress where patents are blocking:

> This is often the case where patents covering improvements of a basic process, owned by one manufacturer, are granted to another. A patent may be rendered quite useless, or “blocked,” by another unexpired patent which covers a vitally related feature of the manufacturing process. Unless some agreement can be reached, the parties are hampered and exposed to litigation. And, frequently, the cost of litigation to a patentee is greater than the value of a patent for a minor improvement.

In upholding the oil industry pool, the Court stressed the fact that the cracking patents were available to all potential licensees on reasonable terms: “If the available advantages [of the patents] are open on reasonable terms to all manufacturers desiring to participate, such interchange may promote rather than restrain competition.”
The Court was at the same time sympathetic to the government’s contentions that the royalty provisions imposed excessive fees and allowed the pool participants to fix prices. The Court acknowledged the competitive threat posed:

*If combining patent owners effectively dominate an industry, the power to fix and maintain royalties is tantamount to the power to fix prices.* . . . Where domination exists, a pooling of competing process patents, or an exchange of licenses for the purpose of curtailing the manufacture and supply of an unpatented product is beyond the privileges conferred by the patents and constitutes a violation of the Sherman Act. The lawful individual monopolies granted by the patent statutes cannot be unitedly exercised to restrain competition.

The Court held that “[u]nless the industry is dominated, or interstate commerce directly restrained, the Sherman Act does not require cross-licensing patentees to license at reasonable rates others engaged in interstate commerce.”

In *Standard Oil*, the Court found substantial competition in the end product marketplace from gasoline made by other cracking processes and by older, non-cracking processes. Therefore, the pool participants did not have the kind of dominance necessary for the pool to be unlawful. The key to the Court’s economic analysis was that the defendants and their licensees accounted for only 55% of total cracking capacity, the cracking processes only accounted for about 26% of the downstream product - gasoline, and cracked and ordinary or straight gasoline were sold interchangeably. Thus, other firms wanting to produce and sell gasoline did not have to go through the defendants in order to compete; they could use the older methods of refining. The Court explained, under these circumstances, the defendants “could not effectively control the supply or fix the price of cracked gasoline.”

The Supreme Court decision in *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 U.S. 1, 11-12, 22-24 (1979), which addressed copyright pools, is instructive. The Court held that the rule of reason should be used to analyze blanket licenses among thousands of music copyright holders to allow thousands of users to perform millions of compositions, even though there was literal price fixing. Significantly, not only did the copyright holders there retain the right individually to license their works, but the Court also noted that a pre-existing consent decree mandated licensing at a reasonable fee, and thus there was “no legal, practical, or conspiratorial impediment” to obtaining individual licenses.

At the same time, the Court in BMI reasoned that agreement on price was necessary for the creation of a “different product” with “unique characteristics”: the blanket license, which individual owners could not issue. Indeed, if users had to negotiate with each individual holder of performance rights in each musical work, the Court reasoned, transaction costs as well as costs of monitoring and enforcement would have been prohibitive, making such negotiations a “virtual
impossibility.” The licensing societies, “in short, made a market in which individual composers are inherently unable to compete fully effectively.”

Put simply, the case law stands for the proposition that pools may be efficient mechanisms for dissemination of technologies that require access to a large number of patents held by multiple parties, but may also lessen competition in licensing of technology and in downstream markets. “The lawful individual monopolies granted by the patent statutes cannot be unitedly exercised to restrain competition.” Standard Oil Co. v. United States, 283 U.S. at 174.

The 1995 IP Guidelines

Building upon the court decisions, the IP Guidelines explicitly recognize that patent pools may provide competitive benefits by (1) integrating complementary technologies, (2) reducing transaction costs, (3) clearing blocking positions, and (4) avoiding costly infringement litigation. The key point is that patent pools are procompetitive where they serve to “promot[e] the dissemination of technology.” IP Guidelines ¶ 5.5.

The Guidelines also recognize that pools can be anticompetitive. Thus, the agencies advise that pooling arrangements will be challenged as per se unlawful if they are “mechanisms to accomplish naked price fixing or market division.” The Guidelines explain further that exclusion from a pooling arrangement where pool participants “collectively possess market power” may harm competition where “excluded firms cannot effectively compete in the relevant markets for the good incorporating the licensed technologies.” IP Guidelines ¶ 5.5.

The Guidelines also warn that pooling arrangements may deter or discourage participants from engaging in research and development. As the Guidelines explain, for example, an arrangement that requires members to grant licenses to each other “for current and future technology” may reduce incentives to engage in R&D. Where members of a pool have to share successful R&D and each of the members can free ride on the accomplishments of other pool members, the arrangement may retard innovation. IP Guidelines ¶ 5.5.

The DOJ Opinion Letters

Antitrust counseling today with respect to patent pools is driven largely by three DOJ Business Review Letters issued from 1997 to 1999. Those letters state the Department’s present intention not to initiate enforcement action based upon the requestors’ representations and assurances but reserving the right to take action if the pools prove to be anticompetitive in purpose or effect. The three letters relate to the MPEG LA and DVD patent pools. In those letters, DOJ specifically identified potential competitive concerns and restrictions in the proposed pools to prevent such anticompetitive effects. The letters explained that the pools might restrict competition:

- among intellectual property rights within the pool;
- among downstream products incorporating the pooled patents; or
- in innovation among parties to the pool.

To prevent such concerns the opinion letters set forth a roadmap of practices that should minimize antitrust risk. Those limitations would require that patent owners:

- limit pools to patents essential to implementing the standard;
- ensure royalties are small relative to the total cost of manufacturing downstream products;
- license on a nondiscriminatory basis to all interested persons;
allow each patent holder to license its patents outside the pool;
• limit access to competitively sensitive proprietary information; and
• avoid grantback provisions that limit incentives to innovate.

The Limitation to “Essential” Patents

A pool presents the greatest risk of harming competition when it is comprised of patents deemed to be “competing” or “substitutes.” By combining substitute patents, a pool can be used as a price-fixing mechanism, ultimately raising the price of products and services that utilize the pooled patents. Thus, Standard Oil focuses on combining “blocking patents” and the IP Guidelines focus on combining “complementary technologies.”

Price-fixing was the core allegation in the FTC’s 1998 challenge to Summit Technology and VISX’s patent pool involving patents for photo refractive keratectomy (PRK) vision correcting eye surgery. The FTC there alleged that Summit and VISX pooled existing and future patents in a partnership to license third parties. Each firm “relinquished the right to unilaterally license” and each was given the right and power to prevent the pool from licensing any of the pooled patents. Moreover, according to the FTC, the two firms agreed each would pay a per procedure fee to the partnership pool, the level of which would be set at the “higher of the amounts separately proposed” by either firm. The FTC characterized this arrangement as “price fixing under the guise of a patent cross-licensing arrangement.”

In a key allegation, the FTC asserted Summit and VISX “could have and would have competed” with one another in the sale or lease of PRK equipment by using their respective patents, licensing them, or both, even “in the absence of” the pooling agreement. The FTC alleged Summit and VISX also “would have engaged in competition” with each other in connection with the licensing of technology related to PRK. While recognizing the Summit-VISX pool reduced the uncertainty and expense associated with patent litigation, the FTC nonetheless reasoned that Summit and VISX could have entered “simple licenses or cross-licenses that did not dictate prices to users or restrict entry,” and, significantly, “patent infringement would not have precluded either firm from coming to market.”

The three DOJ Business Review Letters address the concern that the pool be comprised only of blocking or complementary and not substitute patents by requiring that pooled patents be “essential” as opposed to “merely advantageous” to implement the standard. Much of the analysis in the DOJ opinion letters is on the independence of the expert retained to assess essentiality as a guarantor that the patents are complements, not substitutes. The letters also address the specific “essentiality” standard applied, which is “technical essentiality” in one pool, “necessary as a practical matter” for which existing alternatives are “economically unfeasible” in the second, and “no ‘realistic’ alternative” in the third, interpreted to mean “economically feasible.”

Inclusion of two or more non-essential patents may in fact be necessary for a pool to be used as a price-fixing scheme. By definition, the absence of any non-essential patents means that firms are not restricting competition that would occur in the absence of the cross-licensing or patent pooling agreement. The inclusion of a single non-essential patent would not allow firms to fix royalties on technologies that might compete in the absence of the agreement. Even the inclusion of one non-essential patent, however, risks foreclosing markets to competing patents outside the pool. A licensee would not be expected to purchase both a pool license, with non-essential patents included, and a non-essential substitute, even if that substitute might be superior.
Practical Issues

There are several practical issues that arise in implementing the current standard.

First, the DOJ Business Review Letters state that a fundamental premise in the analysis is that the patents to be licensed are valid, and that licensing restrictions premised on invalid intellectual property will not withstand antitrust scrutiny. More generally, the IP Guidelines require analysis based upon a conclusion that patents are valid and would be infringed in the absence of the license. Definitive conclusions as to infringement and validity, however, are often made only after years of litigation. Frequently, there is never a definitive conclusion about the infringement or validity of the intellectual property at issue. In practice, licensing and cross-licensing decisions must be made in a world of uncertainty, without the luxury of hiring an independent expert. In these circumstances, firms ought to be able to enter into licensing arrangements based upon reasonable, good faith expectations of patent validity and scope.

Business executives require guidance as to whether conduct is lawful or not depending upon reasonable judgments made in good faith, and should not face treble damages if a patent thought to be valid turns out to be invalid or a conclusion that a patent is blocking is proven wrong. Further guidance from the agencies would be useful to the effect that it is appropriate for business officials to rely upon good faith, reasonable determinations that as to the likely outcome of patent litigation in entering license agreements. Subsequent invalidation or narrowing of the intellectual property at issue should not render earlier licenses illegal unless the firms did not have a good-faith belief that the intellectual property at issue was valid and would have been infringed, or possibly, unless the firms do not adjust their licensing restrictions to reflect new information about the validity or scope of the intellectual property at issue.

On the other side of the equation, firms that take licenses to patent pools ought to have a mechanism to bring relevant information regarding the validity and essentiality of patents in the pool to the attention of the pool’s expert. Small individual licensees of a large portfolio of patents otherwise have little incentive to mount an expensive legal challenge. Even if successful, they are likely to knock out only a small percentage of patents in the portfolio, and even if they knock out the entire portfolio, they are likely to obtain only a small portion of the benefits resulting from their litigation efforts. Even where the royalty allocation formula provides some incentive to pool members to exclude non-essential patents, an effective mechanism is necessary for licensees to do likewise, and reduce the royalty as a consequence. Otherwise, there should be a legitimate concern that combining patents of “uncertain scope and validity” strengthens all of the patents in the pool since a challenger only needs to lose on one patent to be enjoined. This concern has been expressed by the FTC in several merger cases challenging the creation of a “killer patent portfolio.”

A further issue is raised as to the meaning of “essentiality” where some patents may be technically essential to implement a standard but are not necessary as a practical matter for certain potential licensees. This may be the case, for example, where potential licensees already have a license to some of the patents in the pool under an agreement with a member of the pool, even if “[w]hen multiple licenses are needed to use any single item of intellectual property, … a package license may promote ... efficiencies.” IP Guidelines 5.3. Current practice for at least some pools appears to be to insist that all prospective licensees take a single license to the pool’s entire patent portfolio, leaving prospective licensees a coercive “take it or leave it” choice that is not a realistic economic choice. The effect is to condition a license to some patents to a license to others. Ease of administration may be a valid justification for package licenses of blocking or complementary patents where such licenses are voluntary, for the
mutual convenience of the parties. But conditioning a license on taking a license to all the patents of multiple patent owners combined in a single portfolio that a particular firm does not need leaves the firm paying twice for the right to use the technology. Mandatory package licensing ought to be unlawful where a firm is compelled to accept licenses under patents that are “not necessarily needed.”

Potentially even more troubling, what is essential may change over time, if licensees have the incentive and ability to innovate in ways that may reduce costs. But if there is no mechanism for existing licensees or new entrants to establish that a patent is not essential and to pay lower royalties when such firm only needs a portion of the patents in a pool, there will be little incentive to improve upon the standard.

The answer sometimes raised to these sorts of concerns is the suggestion that licenses are always available from individual patent holders and therefore such a restraint is not problematic. DOJ is correct to mandate that pools of complementary patents be non-exclusive and licensors retain the right to license their patents individually. Otherwise, as in Summit-VISX, pool members might exclude competitors from access to the pooled technologies by requiring mutual consent among the participants before licenses under any of the pooled technologies may be granted. Still, individual patent holders will only license their patents outside the pool when it is in their individual interest to do so. The theoretical prospect that potential licensees can obtain individual licenses from individual patent holders in a pool at a total “reasonable” price is unrealistic, given the transaction costs that justify the creation of the pool in the first place and the target price set by the pool’s own allocation formula. It is likely that the sum of individually negotiated royalties will exceed the price for the entire pool.

**Foreclosure of Competition in Related Markets**

Patent pooling arrangements may affect competition not only in the technology market, but also in related downstream markets that use the pooled technologies as inputs. For example, in the DVD Business Review Letters, DOJ recognized the pools might affect competition in downstream markets such as markets for the production of DVD players and discs and for the creation of content to be incorporated onto DVD discs.

The DOJ Business Review letters approved the MPEG and DVD pools with limitations aimed at ensuring they would not foreclose competition in downstream markets. First, DOJ noted in each case that the agreed royalty was a “tiny fraction” of downstream product prices or “small relative to the total costs of manufacture.” Second, DOJ emphasized that the proposed pool “should enhance rather than limit access to the Licensors’ ‘essential’ patents” because the pool is required to license “on a non-discriminatory basis to all interested parties,” and cannot “impose disadvantageous terms on competitors.”

Indeed, in the MPEG letter, DOJ approved having a common licensing administrator “grant licenses . . . on a nondiscriminatory basis,” and collect royalties, and distribute them pro-rata . . . pursuant to a pro-rata allocation based on each Licensor’s proportionate share of the total number of Portfolio patents.” DOJ required that the licensor provide the “same terms and conditions to all would-be licensees” and required that MPEG incorporate a “most-favored-nation” clause ensuring against any attempt to discriminate to the disadvantage of rivals.

In seeking the Business Review Letter, the companies in the 6C pool represented to the government that the licensors would make the essential DVD patents available on “fair, reasonable and non-discriminatory terms” for the manufacture of products conforming to the DVD specifications. The companies reiterated this representation in
arguing the 6C pool would “provide substantial competitive benefits without curtailing competition”:

“The DVD Licensing Program does not threaten to disadvantage competitors. … [T]he MOU here obligates members of the pool to make all of their present and future essential DVD patents available on fair, reasonable and non-discriminatory terms to third parties. . . . The DVD Portfolio License . . . includes a most-favored nations clause entitling any licensee to the benefit of favorable royalty terms offered to any other licensee.”

The companies also argued that the royalty rates proposed by the DVD pool were “reasonable.” The companies concluded that “[b]y facilitating licensing of DVD technology, the Licensing Program will also make the benefits of this new technology broadly available to consumers more quickly and encourage the development of competition among DVD products, thereby reducing prices and increasing the performance and functionality that consumers may expect in the marketplace.”

In approving the pool, DOJ considered whether the pool was “likely to impede competition . . . between any Licensor and licensees or other third parties.” DOJ concluded, in its Business Review Letter, “[b]ased on what you have told us, the proposed licensing program does not appear to have any anticompetitive potential in the markets in which the licensed technology will be used.” The Justice Department reached this conclusion because

“First, the agreed royalty is sufficiently small relative to the total costs of manufacture. . . . Second, the proposed program should enhance rather than limit access to the Licensors’ ‘essential’ patents. Because [the pool] must license on a non-discriminatory basis to all interested parties, it cannot impose disadvantageous terms on competitors, let alone refuse to license them altogether.”

DOJ noted also that “each Licensor’s commitment to license its ‘essential’ patents independently of the pool on reasonable, non-discriminatory terms may further ensure that the proposed program facilitates, rather than forecloses, access.”

Practical Issues

Several issues are raised by this analysis.

First is the question what is a “reasonable” royalty? In its letter on the 6C pool, DOJ itself recognized that “the meaning of ‘reasonable’ is open to various interpretations.” While intuitively a royalty of less than a few percentage points may seem small, there is no standard in either the DOJ opinion letters or in the case law to guide business officials.

Closely related to the first point is what happens over time. The MPEG and DVD per disc royalties are set in cents per unit while the DVD player royalties are set as a percentage of sales price with a minimum per unit fee. The problem with this approach is that a royalty that appears small when imposed may grow to be significant over time as costs of producing downstream products fall, as they often do in high-tech industries. In order to be considered small, parties should be required to charge a percentage royalty - or at least have a percentage cap - that cannot grow to become significant over time.

Also related is the question of how to account for multiple royalties imposed by different pools or independent technology owners in evaluating whether a royalty is small. Coincidentally, the three patent pools addressed in the DOJ opinion letters, MPEG, DVD 3C and DVD 6C, all apply to DVD disc manufacturers. In evaluating the reasonableness of a royalty, whether to determine
the likelihood of collusion or foreclosure, the relevant figure may well be the sum of all royalties imposed, and not just that imposed by a single pool.

In addition, further clarification is essential as to permissible discrimination. The DVD pools appear to have narrowed their representations limiting discrimination without comment in the DOJ Business Review Letters compared to the MPEG pool. The MPEG letter clearly provides that the pool will provide “the same terms and conditions to all licensees.” On the other hand, the DVD 3C pool includes only a “most favorable conditions” clause entitling licensees to the benefit of any lower royalty “rate” granted licensees under “otherwise similar and substantially the same conditions.” The DVD 6C pool promised “a most-favored nations clause” entitling licensees to the benefits of “favorable royalty terms offered to any other licensee.” In practice, the DVD pools are now offering different royalty rates to different licensees, depending upon when prospective licensees sign licenses. Even when offering the same royalty rates, the DVD pools are offering different terms to different licensees. Given the potential for significant differences in effective price through non-price terms, such discrimination may swallow the prohibition if allowed.

Some discrimination may be appropriate in licensing firms using pooled technology in different applications. Indeed, the DOJ Business Review Letters, without comment, allow the DVD pools to charge different rates to firms producing DVD players and those producing DVD discs. It may be equally appropriate to allow different royalties rates to be charged firms selling stand-alone DVD players to be used with televisions and to firms selling computers with DVD drives, so long as those downstream products do not compete. All firms producing competing products must, however, be treated similarly to prevent the pools from being used to foreclose downstream competition.

Finally, and perhaps most significant, there are situations where pool members have a license to pooled technology at zero royalty, or at some royalty less than that charged under the pool licenses to independent licensees. That is, discriminatory royalties are being charged to similarly situated firms that compete in downstream markets, imposing disadvantageous terms on independent competitors that have to take the pool license. The combined impact of a substantial royalty and this discrimination completely undermines the theoretical justification for patent pooling: the dissemination of technology. That is, such a pool is no longer “an efficient and procompetitive method of disseminating [intellectual property] rights to would-be users.” It is instead a de facto exclusive agreement to limit licensing and stop competition. The adverse effect of this practice may be to allow inefficient competitors to dominate downstream markets by combining the power of the patents in the pool to the exclusion of efficient independent competitors. A recent law review article explains:

Suppose a portion of the industry combines to set a standard, components of which are protected by intellectual property rights, and then charges the rest of the industry a very substantial sum for access to those intellectual property rights. Depending on the power of the standard setters and on the royalty, this could put the rest of the industry at a long-term competitive disadvantage.

J. Barton, Antitrust Treatment of Oligopolies With Mutually Blocking Patent Portfolios, 69 Antitrust L.J. 851, 872 (2002). The preferred approach, approved in the MPEG Business Review Letter, is to require each of the pool members to pay royalties to an independent administrator, and obtain their proportionate share of all royalties in a lump sum distribution.


**Effect on Innovation**

It is also necessary to consider the impact of patent pools on innovation. The DOJ Business Review Letters require that pools not discourage innovation, either through “outright prohibition or economic incentives,” by any licensor or licensee developing rival products or technologies.

The government has paid particular attention to grantback clauses, noting that grantbacks may reduce licensees’ incentives to innovate and threaten competitive harm. In approving the 3C pool, DOJ considered grantback obligations that it concluded would likely force cross-licenses on “reasonable, non-discriminatory conditions” only on “already extant” essential patents. DOJ noted that the scope of the grantback was “commensurate” with that of the pool, covering only essential patents. The Business Review Letter concluded that the grantback was “so narrow” that it was not likely to create any disincentive among licensees to innovate. Moreover, the grantback could limit holdouts’ ability “to extract a supracompetitive toll” from licensees and lower licensees’ costs in assembling the patent rights essential to compliance with the standard.

In the DVD 6C letter, DOJ approved grantback provisions that plainly covered essential patents obtained in the future on the grounds that the grantback was “commensurate” with that of the license. Moreover, the pool’s royalty allocation formula weighted royalties so newer patents were weighted more heavily than older ones. DOJ reasoned that the pool thus did not prevent firms from capturing value in non-essential technology and licensors would benefit from introducing new essential patents into the pool.

In this context, DOJ has also focused attention on termination rights that allow withdrawal from a particular licensee’s portfolio license if the licensee sues for infringement and refuses to grant a license on fair and reasonable terms. DOJ has approved pools with a partial termination right, allowing a licensor to withdraw from a licensee’s portfolio license if sued for infringement of an essential patent or a related patent by a licensee that refuses to grant a license on “fair and reasonable terms.” At the same time, however, DOJ expressed concern that a partial termination right designed to benefit all portfolio licensees would function much like a compulsory grantback, and thus could have a significant impact on the incentive of licensees to engage in R&D.

**Practical Issues**

In recent years, a number of standards agreements and patent pools in high-tech industries have contained broad grantback provisions and termination rights. Such provisions certainly cannot be characterized as narrow, limited to essential, extant patents, or commensurate with the license. Promoters of these provisions have argued that they lead to broad cross-licensing and are therefore efficient. On the other hand, these provisions may reduce incentives for innovation rivalry. For example, there are agreements that automatically terminate a party’s license if a licensee initiates any infringement action. Notably, such provisions (1) cover entirely unrelated technology, (2) cover future as well as present patents, (3) cover non-essential as well as essential patents, and (4) provide for termination regardless of the other firm’s willingness to grant a license on reasonable terms. Potential licensees may have little choice but to accept such terms.

* * *

Further guidance on the practical issues identified above through revised Guidelines, additional Business Review Letters and enforcement actions would give a clearer roadmap to intellectual property owners considering forming patent pools and to businesses negotiating licenses with such pools.
End Notes


7. See also United States v. National Lead Co., 63 F. Supp. 513 (S.D.N.Y. 1945), aff’d, 332 U.S. 319 (1947) (agreement among leading titanium dioxide companies to nonexclusively license patents is illegal where arrangement strengthened parties to the exclusion of outsiders).

8. Lower court cases following BMI have held that blanket licenses will be unlawful if individual licenses are not “fully available” or there are not “realistic available alternatives.” Buffalo Broad. Co. v. American Soc’y of Composers, Authors and Publishers, 744 F.2d 917, 933 (2d Cir. 1984), cert. denied, 469 U.S. 1211 (1985); CBS v. American Soc’y of Composers, Authors and Publishers, 620 F.2d 930, 935-36 (2d Cir. 1980), cert. denied, 450 U.S. 970 (1981). The IP Guidelines similarly advise that a “nominally non-exclusive” license may be “exclusive in fact” and “give rise to the same concerns as posed by formal exclusivity.” IP Guidelines ¶ 4.1.2, Example 11.

9. The IP Guidelines incorporate this concept by recognizing that “substantially reducing transaction costs” qualifies as an “efficiency enhancing integration of economic activity” sufficient to warrant rule of reason treatment of restraints in licensing arrangements. IP Guidelines ¶ 3.4.

10. The leading antitrust treatise similarly advises that a patent licensing scheme that is “unreasonably exclusionary” may be found unlawful because of the “market power of the participants and the success of the scheme in deterring entry without producing significant procompetitive benefits.” The treatise notes that the Supreme Court has condemned “arrangements under which the dominant firm or firms in an industry have pooled patents from a number of inventors and then denied rivals access to the technology.” H. Hovenkamp, XII Antitrust Law, ¶ 2043 at 238 (1999 ed.) (citing United States v. Besser Mfg. Co., 96 F. Supp. 304, aff’d, 343 U.S. 444 (1952) (Sherman Act violated where “the patentees have joined hands with the two largest competitors in the industry and by terms of their agreement have virtually made it impossible for others to obtain rights under those patents”)). See also Honeywell, Inc. v. Sperry Rand Corp., 1974-1 Trade Cas. ¶ 74,874 (D. Minn. 1973) (patent cross-licenses, while not expressly exclusive, were “de facto exclusive” and unreasonable where defendants reaped an “unfair advantage” over unlicensed rivals).

11. While it is tempting to believe that focus upon lessening of innovation is a recent concern, arising from the IP Guidelines’ recognition of innovation markets, Hartford Empire in 1945 emphasized that “invention of glassmaking machinery had been discouraged” by the patent pools at issue there. 323 U.S. at 400.

12. See MPEG LA Business Review Letter (June 26, 1997); DVD 3C Business Review Letter (Dec. 16, 1998); DVD 6C Business Review Letter (June 10, 1999). The MPEG LA pool contains patents used to implement the MPEG-2 standard approved as an international standard by the Motion Picture Experts Group of the International
Organization for Standards (ISO) and others for compressing video data, allowing savings in storage and transmission. The DVD pools contain patents used to implement the Digital Versatile Disc-Video and Read-Only-Memory standard specifications adopted privately by the pool members and one other firm. The DOJ DVD letters refer only to members of the pools, but those pools are generally known by the number of companies in each pool (Philips, Pioneer, and Sony = 3C; Hitachi, Matsushita, Mitsubishi, Time Warner, Toshiba, and JVC = 6C).


15. See Ciba-Geigy, Ltd., 123 F.T.C. 842 (1997) (”[t]he merger will heighten barriers to entry by combining portfolios of patents and patent applications of uncertain breadth and validity, requiring potential entrants to invent around or declare invalid a greater array of patents”; “[t]he merger will create a disincentive in the merged firm to license intellectual property rights or to collaborate with other companies”; “[w]hereas before the merger third parties might have had the option of licensing one party’s patents or challenging the validity of the other’s, the merger created a “killer” patent portfolio so broad as to create a disincentive to license third parties”); Hoechst A.G., Dkt. C-3919 (2000). See also W. Tom and J. Newberg, “U.S. Enforcement Approaches to the Antitrust/Intellectual Property Interface,” in Competition Policy and Intellectual Property Rights in the Knowledge-Based Economy 343, 371 (1998).


