

RIPPLES IN THE PATENT POOL: THE IMPACT AND IMPLICATIONS OF THE EVOLVING ESSENTIALITY ANALYSIS

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Over the past several decades, the U.S. approach to patent pool licensing has evolved from a very strict and cautious analysis to a more supportive proclamation of the pro-competitive potential of patent pool licensing arrangements. This current enthusiasm is also reflected by the European Commission's Guidelines on Technology Transfer Agreements, which are patterned after U.S. policy and regulations on intellectual property and competition. In addressing competition issues related to patent pools, U.S. courts and antitrust agencies such as the Department of Justice (DOJ) and the Federal Trade Commission (FTC) focus heavily on the essentiality of the patents involved in the licensing arrangement. In fact, case law and administrative opinions suggest that the essentiality analysis is often the "thumb on the scale" when the competitive harm and benefits of a patent pool licensing arrangement are being assessed. In general, the inclusion of "non-essential" patents in patent pool arrangements tends to raise anti-competition concerns, while the dominant presence of "essential" patents is viewed as pro-competitive.

However, some "pool-watchers"¹ argue that there is an emerging trend whereby U.S. courts and agencies are relaxing the essentiality standard, and are now more likely to broadly allow non-essential, potentially competing patents to be included in patent licensing packages and patent pool arrange-

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1. "Pool-watchers", as defined by this author, include students, authors, legal practitioners, commentators, and other experts specializing in the fields of intellectual property and antitrust law. For the purposes of this note, I have chosen to refer to this group as "pool-watchers", based on their published opinions on patent/technology licensing matters occurring at the intersection of intellectual property and antitrust law. As evidenced by their work, most of the "pool-watchers" cited in this Note tend to have a more conservative view of what types of patents should or should not be included in a patent pool.

ments. If true, this could signal a significant change in the U.S. perception of competition in patent pools, and thus a departure from the approach of the European Commission (EC) guidelines, which currently view the inclusion of non-essential patents with a much more suspicious eye. Since this suspected change could lead to anti-competitive effects such as increased price-fixing and monopolies, the pool-watchers' concerns raise several questions: Is the U.S. possibly coming full circle to re-embrace its past perception of patent pools as "untouchable," or are pool-watchers simply reading recent Federal Circuit decisions too broadly; should courts and antitrust agencies be more conservative when applying the essentiality standard? Clearly, globalization has created a demand for technologies which meet international standards and are equally available in both the U.S. and Europe. Seeking to capitalize on this global demand and protect their inventions, many inventors and patent owners patent and market their technologies in both Europe and the U.S. Since the alleged change mentioned above could thus affect patent and technology competition on an international scale, this brings us to the final question raised by pool-watcher concerns: Could the alleged change in the U.S. legal and economic approach to patent pool licensing spark a similar development in the E.U.?

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I.

INTRODUCTION

A patent pool is an agreement between two or more patent owners to license one or more of their patents to each other, or to third party licensees.² In forming a patent pool, the members may simply agree to exchange licenses.³ Alternatively, the members may opt to assign their patent rights to a separate entity, which is then used to license the patented technology to third parties (and sometimes back to the pool members themselves).⁴

Patent pools undoubtedly give rise to many economic benefits, such as the introduction of new products and industry standards. Examples of such industry standards range from the sewing machine⁵ to aircraft⁶ to the modern-day DVD stan-

2. See Joel I. Klein, An Address on Cross-Licensing and Antitrust Law to the American Intellectual Property Law Association (May 2, 1997), transcript available at <http://www.usdoj.gov/atr/public/speeches/1118.htm>. Through the formation of patent pools, patent owners can combine patents (and thus the technologies covered by them), thereby waiving their patent rights and allowing third parties or themselves to obtain licenses from the pool.

3. "Like a cross-license, a patent pool is a mutual exchange of patent rights. . . . An exchange of licenses among multiple parties might be denominated a patent pool – even though the arrangement may otherwise be indistinguishable from a bilateral cross-license." HERBERT HOVENKAMP ET AL., IP AND ANTITRUST §34.2b (Supp. 2003).

4. See, e.g., Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293, 1340 (1996) ("In a patent pool, multiple patent holders [may] assign or license their individual rights to a central entity, which in turn exploits the collective rights by licensing, manufacturing, or both.").

5. In the 1850's, many different businesses held patents on the basic components of sewing machine technology, which created a "blocking" situ-

dard, which enables us to enjoy the standardized use of DVD-ROM drives, DVD-players and DVD decoders.⁷ In light of the fast-moving pace of technology and consumer demand for technology in general, the formation and operation of patent pools continues to grow in importance.⁸ While the public's appetite for newer and faster technology continues to grow, there is undoubtedly an increased incentive to innovate and improve upon existing products.⁹

It is no surprise that this innovation has been a major contributor to the formation of what is now known as a "patent thicket."¹⁰ Among the several patents in this thicket, there are bound to be those which cover technologies which are in blocking, competing or complementary relationships with each other.¹¹ As a result, absent a patent pooling situation,

ation whereby no single firm could create and use a sewing machine without infringing on another business' patent(s). As such, the creation of the patent pool in this scenario more or less grew out of necessity. This combination of sewing machine patents was one of the first patent pools in existence.

6. The aircraft patent pool also grew out of a patent blocking situation like the sewing machine pool. It was privately formed in 1917 following the recommendation of a Navy official, and included almost all aircraft manufacturers in the United States.

7. There are actually two DVD patent pools: The DVD 6C pool (formed in 1999) is a private, voluntary pool formed by nine companies, and consists of a combination of 80 U.S. patents for DVD drives, and 90 U.S. patents for DVD discs; the DVD 3C pool (formed in 1998) is another private pool formed by four companies. Any third party licensee wishing to utilize the DVD technology needs to obtain licenses from both pools.

8. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION, at 65-66 (2007) [hereinafter *Antitrust Enforcement and IP*], <http://www.usdoj.gov/atr/public/hearings/ip/222655.pdf> (acknowledging that expert panel consensus that patent pools have become critically important mechanisms for enabling widespread use of new technologies).

9. See Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting* 1 (Mar. 2001), available at <http://faculty.haas.berkeley.edu/shapiro/thicket.pdf>. Shapiro notes that there is currently an impressive amount of R&D and cumulative innovation in process.

10. *Id.* at 1-2. Shapiro defines a "patent thicket" as "a dense web of overlapping intellectual property rights that a company must hack its way through in order to actually commercialize new technology."

11. "A *blocking* patent is one that prohibits the practice of another patent, but does not necessarily cover all possible design alternatives. As one example, where a patent covers a certain technology, and a second inventor gets a patent that is an improvement on the first invention, the second inventor is blocked from using this technology unless he can obtain a license from the

third parties wishing to use a given patented technology would need to obtain licenses at least from each holder of the blocking patents. This situation could subsequently cause a plethora of problems such as high transaction costs of obtaining licenses, high litigation expenses and hold outs.¹² Consequently, new technologies would be slower in coming to the market, not to mention higher-priced.

Patent thicket problems can be alleviated by pro-competitive patent pool agreements. These types of agreements typically facilitate the integration of complementary technologies, enable patent holders to negotiate around blocking situations, and also create a “one-stop shopping” situation for potential third party licensees.¹³ These considerable benefits of pooling arrangements have not gone unnoticed. In both the U.S. and the E.U., pooling arrangements have long captured and maintained the attention of courts and antitrust authorities. Moreover, the importance and pro-competitive benefits of pooling

first inventor. . . . *Competing* patents are patents on substitutable goods, methods, or technologies. For example, if three separate patents each cover a different type of chair (i.e. wooden, plastic, and metal), the three patents would compete with one another. . . . *Complementary* patents are patents where the use of one patent makes the use of a second patent more valuable. For example, if one firm holds Patent A covering a method for making a pen barrel; another firm holds Patent B covering a method for making a pen cartridge; and yet another firm holds Patent C covering a process for filling the cartridge with ink in such a way that it will not spill out of the pen barrel; then the three patents would be complementary to one another. Cross licensing among these firms would tend to increase competition because each firm could market its own line of complete pens.” V. Walter Bratic et al., *Taking a New Look at Patent Pools – Use and Abuse*, Sep. 23, 2005, available at http://www.haynesboone.com/knowledge/knowledge_detail.asp?groupid=all&page=pubs&pubid=1470&bio=yes.

12. “The vast number of patents currently being issued creates a very real danger that a single product or service will infringe on many patents. Worse yet, many patents cover products or processes already being widely used when the patent issued, making it harder for the companies actually building businesses and manufacturing products to invent around these patents. Add in the fact that a patent holder can seek injunctive relief, i.e., can threaten to shut down the operations of the infringing company, and the possibility for ‘hold up’ becomes all too real.” Shapiro, *supra* note 9, at 3.

13. See, e.g., *Antitrust Enforcement and IP*, *supra* note 8, at 65 (“[O]btaining a pool license [via a patent pool] may be less costly than negotiating separate licenses with each patent owner. . . . [T]his simplified approach to licensing can enable more rapid development and adoption of new technologies than could be achieved with cross licensing alone.”).

arrangements have been expressed in the antitrust/competition guidelines of both the U.S. and the E.U. In the U.S., the relevant antitrust guidelines related to pooling arrangements are called the *IP Guidelines*,¹⁴ created by the Department of Justice (DOJ) and the Federal Trade Commission (FTC) in 1995. In the E.U., the relevant guidelines are found in the European Commission's Transfer of Technology Guidelines (*TT Guidelines*).¹⁵

In addition to sharing their enthusiasm for the pro-competitive potential of pooling arrangements, antitrust authorities in the E.U. and the U.S. also share concerns related to the anti-competitive potential of pooling arrangements. These concerns include the possibility that pool members will engage in price fixing, suppression of competition (especially in downstream markets), market monopolization, unwarranted exclusion of participants from the pool, and unreasonably restrictive third party licensing agreements.¹⁶

14. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY § 5.5, at 28, *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,132, *available at* <http://www.usdoj.gov/atr/public/guidelines/0558.pdf> [hereinafter *IP Guidelines*]. On page 28, the agencies state that "Cross-licensing and pooling arrangements. . . may provide procompetitive benefits 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."

15. European Commission Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements, 2004 O.J. C101 [hereinafter *TT Guidelines*]. In article 214, the EC notes that technology pools can reduce transaction costs and set a limit on cumulative royalties. "The creation of a pool allows for one-stop licensing of the technologies covered by the pool." *TT Guidelines* art. 214. At the writing of this article, this version of the *TT Guidelines* is the most recent version.

16. *See IP Guidelines* at 28 ("Cross-licensing and pooling arrangements can have anticompetitive effects in certain circumstances. For example, collective price or output restraints in pooling arrangements, such as the joint marketing of pooled intellectual property rights with collective price setting. . . may be deemed unlawful if they do not contribute to an efficiency-enhancing integration of economic activity among the participants."); *see also TT Guidelines* art. 213 ("Technology pools may be restrictive of competition. The creation of a technology pool necessarily implies joint selling of the pooled technologies, which in the case of pools composed solely or predominantly of substitute technologies amounts to a price fixing cartel. Moreover, in addition to reducing competition between the parties, technology pools may also, in particular when they support an industry standard . . .

As a result, when evaluating a given pooling arrangement, antitrust authorities in both nations currently aim to balance the pro-competitive potential of the pool's activities against the anti-competitive potential, with the underlying goal of ensuring that the pooling arrangement in question does not harm competition. Due to the important role of patent pooling arrangements, this balancing act is by no means a trivial activity. While ensuring that economically healthy competition is preserved, we should not do so at the cost of preventing a highly beneficial standard or technology from being released onto the market.¹⁷ As a result, courts and other antitrust review bodies need to carefully and efficiently evaluate each potential pooling arrangement, especially those that propose the formation or improvement of major technological standards. This would ensure that the decision emerging from the antitrust review not only benefits competition, but also public consumers.

A look at the legal and economic evaluation of patent pools over the past several decades quickly reveals that within the patent pool assessment process, the patent essentiality analysis has been given significant attention. In fact, as illustrated in recent Federal Circuit decisions¹⁸ and antitrust agency reviews of major patent pools,¹⁹ the essentiality criterion has arguably become *the* most important factor in patent pool evaluation today. For example, in two recent cases, *Philips*²⁰ and *Philips v. Princo*,²¹ the U.S. Federal Court of Ap-

result in a reduction of innovation by foreclosing alternative technologies. The existence of the standard and the related technology pool may make it more difficult for new and improved technologies to enter the market.”).

17. Preventing the formation of a patent pool can sometimes lead to the “tragedy of the anticommons”. See Shapiro, *supra* note 9, at 6 (“The tragedy of the anti-commons arises when there are multiple gatekeepers, each of whom must grant permission before a resource can be used. With such ‘excessive’ property rights, the resource is likely to be *under-used*. In the case of patents, innovation is stifled.”).

18. See, e.g., U.S. Philips Corp. v. Int’l Trade Comm’n, 424 F.3d 1179 (Fed. Cir. 2005) [hereinafter *Philips*].

19. See, e.g., Letter from Joel I. Klein, Acting Assistant Attorney General, Antitrust Division, Department of Justice, to Gerrard R. Beeney, Esq., Sullivan & Cromwell (June 26, 1997), available at <http://www.usdoj.gov/atr/public/busreview/215742.pdf> [hereinafter *the MPEG Pool Letter*].

20. *Philips*, 424 F.3d at 1194-99.

21. U.S. Philips Corp. v. Princo Corp., 173 F. App’x 832 (Fed. Cir. 2006).

peals focused almost exclusively on the essentiality criterion, leading to its controversial holding that the patents in a licensing arrangement are no longer all required to be "essential."²² Fearing that this decision indicates a relaxation of the U.S. analysis of pooling arrangements, some pool-watchers suggest that this alleged change could lead to the tolerance of previously unenforceable patent licensing practices.²³ They also suggest that it will lead to a marked divergence between the U.S. and E.U. approaches to patent pooling licensing arrangements.²⁴ If true, it may profoundly affect competition relating to pooled technologies and industry standards which are common to both the U.S. and the E.U.

After taking a close look at how 'essential' has been defined, we will analyze the possibility that the *Philips* essentiality analysis is being read too broadly by the pool-watchers. In addition, this paper will also address whether we should generally be less concerned about including non-essential patents in patent pools, and instead conduct case-by-case evaluations of whether they would actually have anti-competitive effects if included in a given patent pool. Next, a more conservative use of the essentiality criterion will be suggested as an alternative approach to that currently employed by antitrust authorities. Finally, the paper will discuss the possible effects of the *Philips* decision on European policy concerning patent pooling arrangements.

II.

PATENT POOLS IN HISTORY — A REFLECTION

A. *Reflecting on Patent Pools in the U.S.*

The U.S. and E.U. legal and economic approaches to patent pools have undergone significant changes since the early

22. See, e.g., *Philips*, 424 F.3d at 1197; Scott Megregian & Helen Bignall, *Competition Law Insight: Patent Pools*, May 8, 2007, http://www.mwe.com/info/pubs/competition_law_insight050807.pdf.

23. See, e.g., Daniel P. Homiller, *Patent Misuse in Patent Pool Licensing: From National Harrow to "The Nine No-Nos" to Not Likely*, 2006 DUKE L. & TECH. REV. 0007 (2006), available at <http://www.law.duke.edu/journals/dltr/articles/pdf/2006dltr0007.pdf>. Homiller suggests that the *Philips* holding will now give incentive for patent pools and licensors to engage in tying and carefree inclusion of non-essential patents in license packages/pools, a practice which was previously frowned upon by US authorities.

24. Megregian & Bignall., *supra* note 22.

twentieth century. In the U.S., §1 and §2 of the Sherman Act bar the restraint and monopolization of trade and/or commerce.²⁵ It might thus seem obvious that, from the outset, patent pools should have been at least partially governed by the Sherman Act. However, patent pool licensing arrangements were initially shielded from antitrust law, under the notion of “absolute freedom of contract.”²⁶ For example, relying on the right to exclude (which is a right endowed by the U.S. patent laws) in an early patent pool decision the Supreme Court of the United States rejected an antitrust challenge to the *Bement*²⁷ pool by declaring that “[T]he general rule is absolute freedom in the use or sale of rights under the patent laws of the United States. The very object of these laws is monopoly, and. . . [t]he fact that the conditions in the contracts keep up the monopoly or fix prices does not render them illegal.”²⁸

Relatively soon after the *Bement* decision, the Supreme Court adopted a much more cautious and careful analysis of patent pools. For example, in *Standard Sanitary*,²⁹ the Court took a detailed look at the provisions in the patent pool at issue³⁰ and concluded that there were many anticompetitive provisions that precluded protection of the patent use by the patent laws.³¹ Based on this evidence, the Court struck down

25. 15 U.S.C. §§ 1-2 (2006).

26. Hovenkamp et al., *supra* note 3.

27. The Bement pool was voluntary and contained around 85 improvement patents for tooth harrows, harrow frames and attachments, which were governed by a separate entity, National Harrow. National Harrow sued for violation of the pool agreement when Bement, one of the members of the pool, sold licenses at prices below those agreed to by the pool entity. *E. Bement & Sons v. Nat'l Harrow Co.*, 186 U.S. 70, 70-84 (1902).

28. *Id.* at 91 (applying the general rule of “absolute freedom” in finding no offense to competition).

29. *Standard Sanitary Mfg. Co. v. United States*, 226 U.S. 20 (1912).

30. The Standard Sanitary pool included almost 90% of the manufacturers of enameled ironware. The pool provision at issue was one which essentially fixed prices at which the ironware would be sold, controlled resale of the product, and prohibited sales to non-pool-members. *Id.*, at 47-48.

31. According to the Court, the provisions in the previous footnote were beyond what was necessary to protect the use of the patents in the pool, and these provisions were clear evidence that the pool had an anti-competitive purpose. *Id.* at 48 (“The agreements clearly, therefore, transcended what was necessary to protect the use of the patent or the monopoly which the law conferred upon it. They passed to the purpose and accomplished a restraint of trade condemned by the Sherman law.”).

the pool. This decision arguably signaled the U.S. courts' recognition that there exists a critically important interface and interaction between Intellectual Property law and Antitrust (Competition) law.

It is widely acknowledged that the Supreme Court's gradual recognition of the pro-competitive benefits of patent pools became evident in the Court's antitrust analysis of the *Standard Oil* patent pool.³² Refusing to adopt a *per se* condemnation of the pool's royalty provisions, the Court chose to highlight the benefits of patent pools, such as litigation avoidance and facilitation of technological advancement, especially where blocking patents are involved.³³ The Court's decision that the pool provisions were not anti-competitive also rested partially on evidence that the pool members did not enjoy market dominance. According to the Court, if there is no market dominance by the licensor, the Sherman Act does not require cross-licensing arrangements to include "reasonable" (i.e. inexpensive) licensing rates.³⁴ Here, it was clear that the Court was moving towards a more economic analysis of patent pools, thereby leaving the broad patent-law-based analysis behind.

Later decisions by the Supreme Court demonstrated its gradual recognition that patent pools may simultaneously have pro-competitive and anti-competitive effects, thus creating the need to balance these effects and opening the door for *per se* condemnations of patent pools engaging in certain types of anti-competitive behavior. For example, in *New Wrinkle*,³⁵ the

32. The Standard Oil patent pool covered "cracking" process technology, for producing gasoline from crude oil.

33. *Standard Oil Co. v. United States*, 283 U.S. 163 at 171 (1931) ("An 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. If the available advantages are upon on reasonable terms to all manufacturers desiring to participate, such interchange may promote rather than restrain competition.") (citations omitted).

34. *Id.* at 172. ("Unless 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.").

35. *United States v. New Wrinkle*, 342 U.S. 371, 380 (1952) ("An arrangement was made between patent holders to pool their patents and fix prices on the products for themselves and their licensees. The purpose and result plainly violate the Sherman Act.").

Court held that the inclusion of a price-fixing provision in a patent pool was a *per se* violation of the Sherman Act.

Meanwhile, on the administrative side, the apparent war against patent pools was ramping up. At the height of patent pool disfavor in the 1960s and 1970s the United States Department of Justice (DOJ) created a strict policy which was called the “Nine No-Nos” of patent licensing, and patent pool arrangements were more or less avoided during the reign of this U.S. policy.³⁶ These “No-Nos” were not statutory or judge-made law — they were an illustration of the DOJ’s “anti-patent-pool” policy at the time. Nevertheless, a violation of any one of these “No-Nos” was considered equivalent to a *per se* violation of the U.S. antitrust laws. Although these “No-Nos” have since been replaced with the current *IP Guidelines* and are no longer enforced,³⁷ there still exist some patent licensing activities which are considered *per se* anti-competitive. These include naked price fixing, output restraints, market division among horizontal competitors, group boycotts and resale price maintenance.

In summary, this line of cases and policy illustrates the evolution of the U.S. courts’ analysis of patent pools: Generally speaking, patent pools have evolved from being untouchable under the notion of “absolute freedom of contract”, to being viewed with substantially more suspicion, and most recently to being more favorably regarded.

36. “[T]he Nine No-Nos were: 1) Requiring a licensee to purchase unpatented materials from the licensor (tying). 2) Requiring a licensee to assign to the licensor patents issued to the licensee after the licensing arrangement is executed. 3) Restricting a purchaser of a patented product in the resale of that product. 4) Restricting a licensee’s freedom to deal in products or services outside the scope of the patent. 5) Agreeing with a licensee that the licensor will not, without the licensee’s consent grant further licenses to any other person. 6) Requiring that the licensee accept a “package” license. 7) Requiring royalties not reasonably related to the licensee’s sales of products covered by the patent. 8) Restricting the licensee’s sales of (unpatented) goods made with the licensed patented process. 9) Requiring a licensee to adhere to specified or minimum prices in the sale of licensed products.” Homiller, *supra* note 23.

37. The “No-Nos” have been noticeably omitted from the *IP Guidelines* in favor of the “rule of reason” analysis. *IP Guidelines*, *supra* note 14, at §3.4 (“In the vast majority of cases, restraints in intellectual property licensing arrangements are evaluated under the rule of reason.”).

B. *Reflecting on Patent Pools in the E.U.*

When considering the governance of patent licensing arrangements, the E.U. equivalent of the Sherman Act is Article 81(3) of the Treaty establishing the European Community.³⁸ As previously mentioned, the current view of patent pools is reflected in the guidelines and publications of U.S. and E.U. antitrust agencies which interpret and enforce the Sherman Act and Article 81(3) respectively.³⁹ Using the *IP Guidelines* as a framework, the FTC and the DOJ routinely review patent pool agreements for potential anti-competitive effects. In Europe, the *TT Guidelines* have been used in a similar fashion to evaluate some of the most well-known and beneficial patent pools.⁴⁰

In contrast to the U.S., there seems to be a dearth of E.U. judicial decisions regarding patent pools. This may be explained by the observation that

[i]n the E.U., patent pools attracted not much enforcement attention until two currents converged: a clarification of U.S. enforcement policy [such as the 1995 U.S. *IP Guidelines*] vis-à-vis non-restrictive or pro-competitive pooling accompanying cooperative re-

38. Article 81(1) of the Treaty establishing the European Community, prohibits agreements which affect trade between the Member States and have the goal or effect of preventing, restricting or distorting competition of competition within the common market. Treaty Establishing the European Community, Nov. 10, 1997, 1997 O.J. (C 340) 3, art. 81(1). Article 81(3), however states that "The provisions of paragraph 1 may, however, be declared inapplicable in the case of any agreement or category of agreements between undertakings, any decision or category of decisions by associates of undertakings, or any concerted practice or category of concerted practices [i.e. patent pools included], which contributes to . . . promoting technical or economic progress[.]" Treaty Establishing the European Community, Nov. 10, 1997, 1997 O.J. (C 340) 3, art. 81(3).

39. For example, the DOJ has mentioned that "[w]hile intellectual property licensing arrangements are typically welfare-enhancing and pro-competitive, antitrust concerns may nonetheless arise, . . . [particularly] when a licensing arrangement harms competition among entities that would have been actual or likely potential competitors in a relevant market in the absence of the license (entities in a 'horizontal relationship')." *IP Guidelines*, *supra* note 13, at §3.1 (citation omitted).

40. An example of this is the European Commission's approval of the 3G Wireless Technology Licensing Agreements. 3G networks are wide area cellular telephone networks which provide, *inter alia*, high-speed internet access.

search and standardization in the information industry, and precisely the internationalization of research collaboration and of joint standard-setting in these industries and in telecommunications, wherein large European enterprises were involved or even played a major role.⁴¹

Thus, Europe apparently became more involved in patent pool policy due to recent advances in technological industries in which Europe had a significant interest. Ullrich's observation further suggests that the E.U. sought (for better or for worse) to pattern their policies after the U.S. in lieu of creating their policies and rules from the ground up. The history of E.U. patent policy provides some support for this suggestion.

Before 1996, the European Commission (EC) employed two separate block exemptions - one for patent licenses and the other for know-how patents - to govern intellectual property licenses.⁴² This structured approach was very similar to the DOJ's "Nine No-Nos," in that "all restrictive agreements, regardless of whether these agreements are, on balance, pro-competitive" were prohibited and void "unless the agreements in question have been formally exempted pursuant to an individual decision under Article [81(3)], or a block exemption adopted pursuant thereto."⁴³

Around 2001, the E.U. was seeking to emulate the U.S. *IP Guidelines* and employ a more economically-based approach to patent license arrangements.⁴⁴ It is therefore not surprising that by 2004, the 1996 version of the EC Technology Transfer Block Exemption Regulation (TTBER) was replaced by a new TTBER.⁴⁵ This regulation sets out the new European Commis-

41. Hanns Ullrich, *Patent Pools - Policy and Problems*, RESEARCH HANDBOOK ON INTELLECTUAL PROPERTY AND COMPETITION LAW (Josef Drexler, ed., forthcoming).

42. Willard K. Tom et al., *U.S. and E.C. Antitrust Approaches to Patent Uncertainty*, 34 LAW & POL'Y INT'L BUS. 859, 863 (2003).

43. *Id.* at 863-864 (citing Sebastiano Guttuso, *Technology Transfer Agreements*, in FORDHAM CORP. L. INST., 227, 235 (Barry E. Hawk, ed., 1995)).

44. Ullrich, *supra* note 41, at 5.

45. This new version of the regulation is Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements, OJ No 123, 27.04.2004, p. 11 [hereinafter *TTBER*].

sion (EC) rules for the licensing of patents, know-how and software copyright. The *TT Guidelines* were also developed in 2004 to “explain the application of the *TTBER* and provide a framework for analyzing technology license agreements that fall outside the scope of the *TTBER*.”⁴⁶

Notwithstanding their similarities, the side-by-side development of the *IP Guidelines* and the *TT Guidelines* has created a two-pronged framework for patent pool review. Though these two sets of guidelines are similar in many respects, they are not identical. Furthermore, patent rights are territorial, and the technology covered by a U.S. patent therefore may not receive the same legal treatment in the E.U. It follows logically that patent pools which contain members of, or operate in, both the U.S. and E.U. are already subjected to two separate evaluations which affect their operation in each respective nation - one evaluation from the DOJ/FTC according to the U.S. *IP Guidelines* and the other evaluation from the EC according to the E.U.’s *TT Guidelines*.

Research so far has indicated that despite the dual evaluation involved, this current framework typically results in a “unanimous” approval or disapproval of patent pool arrangements which significantly affect major industries common to both the U.S. and the E.U.⁴⁷ However, based on the pool-watchers’ concerns, the potential impact of the *Philips* decision puts the integrity of this framework at risk. Given the framework’s high dependency on the essentiality analysis, it is thus necessary to compare the *IP Guidelines* with the *TT Guidelines* with focus on the pre-*Philips* emphasis that both sets of guidelines placed on patent essentiality. This study will help to establish whether the pool-watcher theories regarding the *Philips* decision and essentiality are justified.

46. Wilko van Weert & Filip Ragolle, *The New EU Technology Licensing Rules 1* (2004), available at <http://les-benelux.org/level1/news/ttber.pdf>.

47. Again, an example of this is the approval of the 3G patent pool, which was a significant development in the telecommunications industry.

III.

THE U.S. AND E.U. ANALYSIS OF PATENT POOLS — A STUDY OF
ESSENTIALITYA. *Comparing the Guidelines*

The first noteworthy comparison of the two sets of guidelines involves the relative strength of their legal influence. Similar to the policies and guidelines of most other U.S. federal agencies, the *IP Guidelines* are not binding on courts. However, they may still receive deference from courts engaged in antitrust evaluations of patent pools.

In Europe, technology pools — and thus patent pools — fall outside the scope of the *TTBER*, and are therefore analyzed according to the *TT Guidelines*.⁴⁸ Whereas agreements falling under the *TTBER* are automatically considered legally valid and enforceable, those falling outside the scope of the *TTBER* are not *per se* illegal and could still qualify for exemption under Article 81(3). While the *TTBER* has force of law as a regulation, it is said that the *TT Guidelines*, like the *IP Guidelines*, will only be considered as persuasive influence.⁴⁹ However, since only the *TT Guidelines* govern patent licensing agreements which fall outside the *TTBER* (e.g. patent/technology pools), it appears that the *TT Guidelines*, by default, actually have a force-of-law effect on the license agreements they govern.

If true, this implies that the *TT Guidelines* are more powerful than the *IP Guidelines*. In the U.S., since the *IP Guidelines* have only persuasive authority, challengers of established pools need the court system to enforce the principles of the *IP Guidelines*. However, in Europe the EC arguably could strike down a patent pool as anti-competitive if it violates the *TT Guidelines*, without resorting to the European court system. This makes the approach of the E.U.'s *TT Guidelines* appear much more proactive and much less prone to litigation than the U.S. approach. While this observation may require further

48. van Weert and Ragolle, *supra* note 46.

49. Makan Delrahim, Deputy Assistant Attorney Gen., U.S. Dep't of Justice, US and EU Approaches to the Antitrust Analysis of Intellectual Property Licensing: Observations from the Enforcement Perspective, Remarks at the Spring Meeting of the American Bar Association, Section of Antitrust Law (April 1, 2004), available at <http://www.usdoj.gov/atr/public/speeches/203228.pdf>.

empirical analysis, it nevertheless represents an important fundamental difference between the two sets of guidelines - one that critics should pay more attention to when analyzing the similarity of the guidelines.

In the U.S., when it is clear that a patent pool has been created mainly for the purpose of price fixing, a *per se* analysis is normally conducted.⁵⁰ However, U.S. judicial and administrative analysis of patent pool licensing arrangements is normally done under the rule of reason. In simplest terms, an analysis under the rule of reason involves an evaluation and balancing of the anti-competitive effects of the pool against its pro-competitive effects.⁵¹ If the pro-competitive effects of a given pool are dominant (or if anti-competitive effects are minimal or non-existent), agencies and courts are unlikely to take action against the formation or licensing provisions of the pool.⁵² Although an equivalent of the American rule of reason is not explicitly stated in the *TTBER* or the *TT Guidelines*, the European adoption of a similar standard is implied in the language of these documents. Indeed, in Europe patent pools are also assessed for anti-competitive risks and the pro-competitive potential.⁵³

Above all other factors,⁵⁴ the *essentiality of the patents* in the pool currently stands supreme in the administrative and judi-

50. For example, the Summit/VISX pool underwent a *per se* analysis. Here, the pool members were the only FDA-approved manufacturers of laser technology, and they used this advantage to engage in naked price fixing.

51. In judicial proceedings, more emphasis may be placed on *actual* pro/anti-competitive effects; in administrative proceedings where approval for a new pool or for a change in an existing pool's arrangements is sought, more emphasis may be placed on *potential* pro/anti-competitive effects.

52. See, e.g., *The MPEG Pool Letter*, *supra* note 19.

53. See *TT Guidelines*, *supra* note 15, arts. 210-35.

54. Typically, when assessing the pro-competitive and anti-competitive potential of patent pools, antitrust authorities will consider the following factors: 1) patent validity (all patents in a pool must be valid in order for the pool arrangement to be enforceable), 2) use of independent experts (this is favored for the discovery of patents which are essential to the pooled technology), 3) the ability of the pool members to license their patents individually, regardless of the pool arrangement (this is also favored by antitrust authorities), 4) the ability of licensees to develop and use alternative technologies (also seen as pro-competitive), 5) the existence of grant-back provisions (must be reasonable and limited to essential patents -especially in Europe - in order to be pro-competitive), 6) the inclusion of an agreed-to royalty allocation formula in the patent pool agreement (favored), 7) the existence of

cial assessment of patent pool formation and licensing proposals. While any given combination of ten factors may be considered during any review,⁵⁵ an analysis of the essentiality criterion is ever-present in court opinions and business review letters⁵⁶.

“The anti-competitive risks and the efficiency-enhancing potential of technology pools depend to a large extent on the relationship between the pooled technologies and their relationship with technologies outside the pool. In this respect it is important to distinguish between technological complements and substitutes, and [most importantly] between essential and non-essential technologies.”⁵⁷

Due to the high level of importance that courts and antitrust agencies (in both E.U. and the U.S.) have attached to essentiality, it really deserves a closer look.

B. A Closer Look at Essentiality

As previously mentioned, substitute technologies are those for which there are alternatives (i.e. they are competing technologies), such that the pool could function effectively

FRAND terms and non-exclusive licenses in the pool agreement (favored), 8) the presence of safeguards for sensitive business information (favored), 9) whether the patents in the pool are complementary or substitute, 10) the essentiality (and non-essentiality) of the patents in the pool. FRAND is an acronym which means fair, reasonable and non-discriminatory. Regarding factor (9), the presence of substitutes is generally disfavored. This will be elaborated upon later in this section of the paper. For a checklist of conditions/factors which are likely to lead to the approval of a patent pool, see Birgit Verbeure et al., *Patent Pools and diagnostic testing*, TRENDS IN BIOTECHNOLOGY (2006), <http://www.epip.eu/conferences/epip02/lectures/Verbeureetal-2006-TIB-Publication.pdf>.

55. *Id.*

56. The DOJ and FTC opinions on the anti-and-pro-competitive potential of a given patent pool, as well as their intention to (or not to) pursue antitrust action against the pool members, are normally published on their websites as Business Review Letters. In Europe, similar letters (comfort letters) used to be provided to the pool members requesting an antitrust analysis from the EC, but they were never made public or seen by any other parties except the pool members. Since the development of the new TTBER in 2004, the “comfort letter” practice was stopped altogether. Pool members must now refer to the *TT Guidelines* and complete their own antitrust analysis of their pool arrangements.

57. van Weert and Ragolle, *supra* note 46.

with the inclusion of any one (or possibly even none) of them.⁵⁸ If multiple substitute technologies are included in a given pool, it will likely reduce competition between the holders of the substitute patents and subsequently lead to price-fixing and high royalty rates.⁵⁹ Therefore, these types of patents are rarely considered to be “essential” to the formation of a patent pool.⁶⁰ Thus far, antitrust agencies and economists have reinforced the notion that essential patents consist only of patents which are either in a complementary or a blocking relationship.⁶¹

This view, as well as the prominence of patent essentiality, is very well illustrated in the DOJ’s business review letters for the DVD, MPEG and 3G patent pools.⁶² These business review letters are considered to be very important embodiments of

58. Bratic et al., *supra* note 11.

59. van Weert and Ragolle, *supra* note 46.

60. Philip B. Nelson, *Patent Pools: An Economic Assessment of Current Law & Policy*, 38 RUTGERS L.J. 539 (2007). In this law article, Nelson also elaborates on the antitrust risk which exists in the presence of pooled substitute patent technologies: “By controlling technologies that are practical substitutes, the pool obtains the ability to increase licensing fees above competitive levels in a manner that would not be possible if there were competition among substitutable patent technologies. Moreover, when there are not close substitutes for downstream products that rely on the pooled technology, the patent pool may also be able to increase the price of the manufactured products.” *Id.* at 543.

61. Substitute patents therefore fall into the category of “non-essential” patents. However, it is interesting to note that a pool may not actually be functional (especially if it represents a standard) unless it includes at least one of a given group of substitute/competing technologies. In this sense, substitute/competing patents are “essential” to the patent pool.

62. Letter from Joel I. Klein, Assistant Att’y Gen., Antitrust Div., Dep’t of Justice, to Carey R. Ramos, Esq., Paul, Weiss, Rifkind, Wharton & Garrison (June 10, 1999), available at <http://www.usdoj.gov/atr/public/busreview/2485.pdf> [hereinafter *DVD-6C Letter*]; Letter from Joel I. Klein, Assistant Att’y Gen., Antitrust Div., Dep’t of Justice, to Garrard R. Beeney, Esq., Sullivan & Cromwell (Dec. 16, 1998), available at <http://www.usdoj.gov/atr/public/busreview/2121.pdf> [hereinafter *DVD-3C Letter*]; Letter from Joel I. Klein, Assistant Att’y Gen., Antitrust Div., Dep’t of Justice, to Garrard R. Beeney, Esq., Sullivan & Cromwell (June 26, 1997), available at <http://www.usdoj.gov/atr/public/busreview/215742.pdf>; Letter from Joel I. Klein, Assistant Att’y Gen., Antitrust Div., Dep’t of Justice, to Ky P. Ewing, Esq. Vinson & Elkins, L.L.P. (Nov. 12, 2002), available at <http://www.usdoj.gov/atr/public/busreview/200455.pdf> [hereinafter *3G Letter*]. The 3G patent pool was focused on the licensing of patents for third generation mobile telecommunication services.

current U.S. policy towards patent pools. The focus on patent essentiality is well illustrated in the MPEG-2 Business Review Letter, where the DOJ concluded that “[t]he limitation of the Portfolio to technically essential patents. . . reduces the risk that the patent pool will be used to eliminate rivalry between potentially competing technologies.”⁶³ The DOJ also cleared the DVD-3 pool formation based mainly on its findings on patent essentiality. For example, in assessing the pool’s potential to integrate complementary patent rights, the agency stated that:

The definition [of “essential”] that the expert will be employing is sufficiently clear and demanding that the portfolio is unlikely to contain patents for which there are *economically viable* substitutes. Thus. . . it is reasonable to expect that the Portfolio will combine complementary patent rights while not limiting competition between them. . .⁶⁴

Additionally, when assessing the pool’s potential effect on innovation, the agency reasoned that “[b]ecause only already-filed ‘essential’ patents and patent applications are required for inclusion in the Portfolio, the program does not discourage the Licensors from continuing research and development that may relate to the standard.”⁶⁵

Similar reasoning was employed in the DVD-6C Business Review Letter, where the agency stated:

The proposed licensing program would require Licensors and licensees alike to agree to license to each other not only their present “essential” patents, but also any ones they obtain in the future. The pro-competitive benefits of such a requirement are clear.⁶⁶

On the European side, the pre-*Philips* emphasis on patent essentiality matched that in the U.S. In fact, in a press release declaring its approval of the 3G pool, the European Commission (EC) declared:

In particular, the [3G pool] agreements set up procedures to identify whether a patent is essential, to

63. *MPEG Letter*, *supra* note 19, at 15.

64. *DVD-3C Letter*, *supra* note 62, at 11.

65. *Id.* at 13.

66. *DVD-6C Letter*, *supra* note 62, at 14.

streamline the licensing of those who are deemed essential and to reduce the overall license fees to be paid for the entire portfolio of essential patents. . . [C]learance under antitrust rules requires that each licensing agreement is limited to essential patents only. . .⁶⁷

Based on this statement alone, there is no doubt that in the pre-*Philips* era, the EC strictly required that all patents in a patent pool be essential.

The above examples clearly demonstrate that the essentiality analysis carries great influence in both the U.S. and E.U. antitrust reviews of patent pool arrangements.⁶⁸ Although the DOJ and FTC were not as explicit as the EC, their strong preference for the inclusion of only essential patents permeates the language of their business review letters. Given the high status of the essentiality factor, it is reasonable to perceive any change in the antitrust authorities' essentiality analysis as a major change in their approach to patent pool licensing practices. This likely explains why most pool-watchers have been using the essentiality analysis of antitrust authorities in the E.U. and U.S. as a litmus test to determine how the framework of antitrust review is evolving.

C. *The Amorphous, Evolving Definition of "Essential"*

Such heavy administrative reliance on the essentiality analysis is highly inappropriate. Some critics may claim that broad dependence on essentiality is justified, namely because in any balancing test performed by most judicial or administrative systems, there always exists one or two factors which are more critical than the other factors in the test.⁶⁹ If correct, this justification should probably also apply to the rule of reason analysis, except for three problems: in administrative pro-

67. Press Release, European Comm'n, Antitrust Clearance for Licensing of Patents for Third Generation Mobile Servs (Nov. 12, 2002), *available at* <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/02/1651&format=HTML&aged=0&language=EN&guiLanguage=en>.

68. In fact, this author is convinced that the essentiality analysis has become *the* test for determining pro-and-anti-competitiveness in the U.S. and in Europe.

69. For example, the test for preliminary injunctions involves the analysis of four factors, but most courts pay significant attention to the *irreparable harm* criterion.

ceedings, there is no consistently used definition of essentiality; the definitions employed by administrative authorities can be overly restrictive at times; and when combined, these issues are likely to present interpretative problems in judicial antitrust (competition) analyses.

To be sure, the value of the essentiality analysis cannot be understated:

The essentiality aspect, which calls for an independent patent evaluator to examine patents to be included in the pools and to identify those patents that are necessary, or essential, to practice the technology associated with the pools, is a mechanism designed to integrate complementary technologies into a pool and clear blocking positions.⁷⁰

However, the amorphous and evolving meaning of “essential” has weaved its way through antitrust evaluations and decisions, leaving the door wide open for the promulgations of inconsistent and/or incorrect identification of essential (and non-essential) patents.

On one hand, in the MPEG-2 Business Review Letter the DOJ accepted the pool’s definition of essential as “any Patent claiming an apparatus and/or method necessary for compliance with the MPEG-2 standard. . . under the laws of the country which issues or published the Patent.”⁷¹ Here, the definition of essential depends in part on the patent laws of the country which issued the patent, and also requires a degree of *technical* essentiality. On the other hand, in the DVD-3C Business Review Letter, the pool members defined essential as “necessary (*as a practical matter*) for compliance with the DVD. . . Standard Specifications.”⁷² Despite the technical requirement embedded in the DVD-3C definition of “essential” (similar to the approved MPEG-2 definition) the DOJ was very uncomfortable with this definition, and communicated this discomfort in their letter, along with *their own subjective interpretation* of the pool members’ definition.⁷³

70. Alexander J. Hadjis, *Patent Pools Gain Popularity*, NAT’L L. J., Dec. 6, 2004, at S14.

71. *MPEG Letter*, *supra* note 19, at 3.

72. *DVD-3C Letter*, *supra* note 62, at 3.

73. The agency specifically stated: “We understand this definition to encompass patents which are technically essential – i.e. inevitably infringed by

This DOJ decision is open to two possible interpretations: (1) On the surface, it appears that the agency is inappropriately modifying the pool members' possibly anti-competitive definition of essentiality (i.e. making it look more like the MPEG-2 definition) simply to justify their approval of the new pool's formation; (2) the DOJ's statements here may also indicate that the agency is simply facilitating the development of a clearer definition of essentiality. Yet, subsequent business review letters from the DOJ failed to further explain the motives behind their interpretation of "essential" in the DVD-3C letter. In fact, only one year after the publication of the DVD-3C Business Review Letter, a different pool-member definition of "essential" was at issue in the DVD-6C Business Review Letter: "A Licensor's patent is 'essential', and thus subject to the commitments in the MOU,⁷⁴ if it is 'necessarily infringed,' or 'there is no realistic alternative' to it, in implementing the DVD Standard Specifications."⁷⁵ The DOJ expressed its concern about the pool's definition of "essential", and once again used their subjective interpretation of the pool's definition so that it seemed more pro-competitive than not:

By asking the expert to identify not only those patents that are literally essential to compliance. . . , but also those for which there is no "realistic" alternative, the definition introduces a degree of subjectivity into the selection process [which could potentially lead to the inclusion of non-essential and/or competing patents]. Based on your representations, however, it appears that the expert will interpret "realistic" to mean "economically feasible."⁷⁶

By restructuring the pool's own definition of "essential", the DOJ not only narrowed the scope of the definition, but also deepened the ambiguity in its meaning.

The definition of "essential" used (and accepted) in the 3G Business Review Letter in 2002 is reminiscent of earlier def-

compliance with the specifications – and those for which existing alternatives are economically unfeasible. As discussed below, a less concrete definition of the term 'as a practical matter' could give rise to difficult competitive issues." *Id.* at n.8.

74. Memorandum Of Understanding.

75. *DVD-6C Letter*, *supra* note 62, at 3.

76. *Id.* at 12.

initions.⁷⁷ However, this definition differed from those in earlier Business Review Letters in that “[f]or a patent to be deemed essential to a particular standard, at least one claim under the patent must be found to be essential.”⁷⁸ As such, this definition explicitly requires a very detailed, claim by claim review that is notably absent from previous definitions. Unfortunately, this definition fails to instruct us in several areas, including: a) whether “non-essential” patent claims pose any anti-competitive risks and if so, how they should be handled under antitrust law (especially since they may be perfectly enforceable under patent law); b) whether the essential claims must be independent claims or can they also depend from non-essential claims; and most importantly c) whether the presence of one “essential” claim is really the proper threshold for determining the essentiality of a patent. In interpreting the 3G pool’s definition of “essential,” the DOJ should have provided much more guidance on these issues. On the European side, the definition of “essential” is not much clearer. According to the *TT Guidelines*,

[a] technology is essential as opposed to non-essential if there are no substitutes for the technology inside or outside the pool and the technology in question constitutes a necessary part of the package of technologies for the purposes of producing the product(s) or carrying out the process(es) to which the pool relates.⁷⁹

Here, what exactly does *necessary* mean? Unfortunately, the *TT Guidelines* have not answered this question thus far.

Faced with all these different administrative definitions of “essential,” U.S. Federal Courts have been faced with the arduous task of selecting and using a consistent definition of “essential.” Does it mean *technically* essential, *literally* essential, essential as a *practical matter*, essential only when there is no *realistic commercial alternative*, or essential only when *at least one claim is essential*? Which definition should courts give deference to, and does it make a difference whether a technological stan-

77. “[A] patent can be found to be essential if it is ‘claiming an apparatus, a method or a process necessary for compliance for the 3G Standards’ and is ‘technically essential.’” *3G Letter*, *supra* note 62, at 6.

78. *Id.*

79. *TT Guidelines*, *supra* note 15, art. 216.

dard is being formed by the pool? Given the amorphous nature of "essential," it follows that "non-essential" may have been improperly defined at times. This implies that the agencies' strict disfavor of what they deemed to be "non-essential" patents has been inappropriate in some cases. This indicates not only that the *Philips* ground-breaking essentiality analysis is to a large extent justified, but also that there may still exist a significant gap between administrative and judicial views of essentiality and the inclusion of non-essential patents in patent pools. All this casts doubt on whether the holdings of *Philips* and related cases actually indicates a *new and concerted* departure from the European approach to patent pools.

IV.

RIPPLES IN THE PATENT POOL

As previously mentioned, the most current pool-watcher concern involves the Federal Circuit's essentiality analysis in the post-*Philips* era,⁸⁰ especially as it relates to tying and the inclusion of non-essential patents in pools.⁸¹ In U.S. case law, impermissible tying has long been regarded as anti-competitive.⁸² Moreover, prior to the *Philips* decision, some pool-watchers had commented:

If it is determined that non-essential patents have been included in a pool and market power exists in connection with the essential patents, there is patent misuse. . . . By tying unnecessary [i.e. non-essential] patents to necessary [i.e. essential] ones, a pool can foreclose competition between technologies covered by the unnecessary patents and alternative technologies.⁸³

Therefore, the *Philips* decision probably represents the materialization of one of the pool-watchers' worst fears,⁸⁴ and this

80. See *supra* p. 611-12.

81. The classic definition of "tying" is the use of a patent license to force the mandatory sale of an unpatented product or the mandatory license of another patent.

82. See, e.g., *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12 (1984).

83. Alexander J. Hadjis, *Patent Pools Gain Popularity*, NAT'L L. J., Dec. 6, 2004, at S14.

84. That is, a fear of U.S. administrative and judicial support of anti-competitive tying. See *supra* p. 611-12.

warrants a close analysis of the *Philips* case and subsequent related case law.

Most pool-watchers would agree that the first ripple to disrupt the previously calm surface of patent pools, arguably impeding what most would call a convergence between U.S. and European patent pool policy, was caused by a stone called *U.S. Philips Corp. v. Int'l Trade Comm'n.*⁸⁵ Even though this was technically not an antitrust case (i.e. it focused mainly on patent misuse), it is relevant to antitrust law since the court relied on antitrust principles, such as the rule of reason and, of course, the essentiality of the patents involved. Undoubtedly, it is well accepted that "[t]he doctrine of patent misuse closely tracks antitrust law principles in many respects. . . ."⁸⁶

A. *The Philips Case and the Pool-Watchers' Reactions*

Since the 1990s, Philips had been licensing packaged patents on CD technology to several companies. Among the many licensing packages offered by Philips was one which included patents which, according to Philips, were both "essential" and "non-essential" for producing compact discs compliant with the related technical standard. As done with earlier packaging options, potential licensees "were not allowed to license. . . patents individually and were not offered a lower royalty rate for licenses to fewer than all the patents in a package."⁸⁷ In other words, the licensees did not have the option of licensing only the "essential" patents, even if they did not wish to utilize the "non-essential" patents in the package.

After several of the licensees stopped paying royalties on the patents,⁸⁸ Philips filed a complaint with the International Trade Commission, which launched an investigation into Philip's licensing practices when the delinquent licensees claimed that Philips had engaged in patent misuse. Specifically, the licensees had claimed that "Philips had improperly forced them, as a condition of licensing patents that were necessary [i.e. essential] to manufacture [CDs], to take licenses to other patents that were not necessary to manufacture those

85. *Philips*, *supra* note 18.

86. *Id.* at 1185.

87. *Id.* at 1182.

88. The licensees were Princo Corporation, GigaStorage Corporation, and Linberg Enterprise Inc.

products.”⁸⁹ Most importantly, the licensees had even claimed that some of the patents that Philips had designated as “essential” were in fact “non-essential,” since there were “commercially viable alternative methods of manufacturing [CDs] that did not require the use of technology covered by those patents.”⁹⁰

In a decision which was affirmed by the Commission, the administrative law judge (ALJ) held that Philip’s licensing practices constituted tying arrangements which were illegal under antitrust law, and therefore was patent misuse. In affirming the ALJ’s decision, the Commission found that: a) some of the Philip’s “essential” patents were actually not “essential” and in fact constituted products separate from the patents that were “essential” to the disc manufacture; and that b) Philip’s packaging of non-essential patents with essential patents was both “per se” patent misuse due to illegal tying, and alternatively “per se” patent misuse under the rule of reason.⁹¹

In reversing the Commission’s decision, the Court of Appeals for the Federal Circuit distinguished between “patent-to-product” tying (which the Commission relied on in their reasoning) and patent-to-patent tying. According to the Court, in patent-to-product tying the patentee can use market power conferred by the patent to foreclose competition in the product market. Regarding patent-to-patent tying, the court reasoned that:

By contrast, a package licensing agreement that includes both essential and non-essential patents does not impose any requirement on the licensee. It does not bar the licensee from using any alternative technology that may be offered by a competitor of the licensor. . . . [I]t merely puts the competitor in the same position he would be in if he were competing with unpatented technology.⁹²

89. *Philips*, *supra* note 18, at 1183.

90. *Id.*

91. “In particular, the Commission held that including such non-essential patents in the licensing packages could foreclose alternative technologies . . . to parties who needed to obtain licenses to Philips’s ‘essential’ patents.” *Id.* at 1184.

92. *Id.* at 1190.

In short, the Court essentially stated that packaging “essential” patents with “non-essential” patents is therefore not per se anticompetitive.

Pool-watchers were in uproar about the decision. Some authors opined that

[t]he policy direction set by the Federal Circuit now appears to suggest that, in the U.S. at least, new considerations come into play. Firstly, the need to make all licenses on portfolio patents individually available may have diminished. Secondly, owners of both essential and non-essential patents may not need to be as vigilant as they might have been in the past as regards excluding non-essential patents from pool arrangements. Accordingly, this may allow for more aggressive (and arguably more restrictive) licensing practices than has previously been the case.⁹³

Other authors have suggested that due to the *Philips* decision, it will become much more difficult for accused infringers to raise a defense of patent misuse: “[A]ccused infringers raising the defense of patent misuse must [now] demonstrate *actual* anticompetitive effects stemming from the licensing practices.”⁹⁴ Echoing this assertion, other pool-watchers, certain that the same analysis used in the *Philips* decision will carry over into antitrust decisions, have claimed that the result of this “carry-over” will be “a substantial narrowing of the per se rule for package licenses, more emphasis on foreclosure, and a more rigorous inquiry into the harm to competition, if any, in the market for the ‘tied’ technology.”⁹⁵

If what these pool-watchers fear turns out to be true, the Federal Court’s essentiality analysis which led to the *Philips* holding probably does signal a significant departure from the European perception of non-essential patents. Moreover, if the *Philips* decision is interpreted and applied as broadly as

93. Scott Megregian & Helen Bignall, *Patent pools*, COMPETITION L. INSIGHT, May 8, 2007, at 12, available at http://www.mwe.com/info/pubs/competition_lawinsight050807.pdf.

94. Homiller, *supra* note 23, at ¶39.

95. Dechert LLP Antitrust Group, *Federal Circuit Holds that Patent “Package License” is Not Patent Misuse*, DECHERT ON POINT, Nov. 2005, at 3, available at http://dechert.com/library/Antitrust_Update14_11-05.pdf.

feared, it could lead to a devastating effect on competition — not just in the U.S., but also on a global scale.

B. *What If the Pool-Watchers Are Right?*

The most obvious impact would be an increased likelihood of anti-competitive bundling of non-essential substitute patents with essential patents. Clearly, patent pool participants who see the *Philips* decision as a *carte-blanche* to bundle patents in this way would harm competition by “foreclosing alternative technologies and retarding innovation.”⁹⁶

Another possible negative effect on competition is that patent pools which currently license technology related to global standards may end up being treated very differently in the U.S. and the E.U. While a patent licensing package which includes both non-essential and essential patents may no longer be considered per se anti-competitive in the U.S., unless the European Commission (EC) changes its current policy the same patent licensing package may be considered anti-competitive in Europe. This situation could lead to problems such as the strategic avoidance of Europe’s patent pool guidelines/policies by potential patent pool participants, in order to gain potentially unjust market power.

Separate treatment of major patent pools on both sides of the Atlantic could also lead to tension between U.S. and E.U. authorities with respect to the global policies that should govern patent pool license agreements. Additionally, if the *Philips* decision does in fact lead to a need for “separate structuring of pools on either side of the Atlantic,”⁹⁷ this may reduce the incentive for parties to pool their patents in the first place.

Faced with the financial and administrative burden of meeting the policy requirements of two diverging sets of policies, some organizations are likely to cut their losses by maintaining a non-pooling status quo. Other organizations that nevertheless chose to pool their patents and technologies may chose to form a pool either in the U.S. or in the E.U. - never in both.

96. David W. Van Etten, *Everyone in the Patent Pool: U.S. Philips Corp. v. Int’l Trade Comm’n*, 22 BERKELEY TECH. L.J. 241, 241 (2007).

97. Megregian & Bignall, *supra* note 93, at 12.

Furthermore, what would this broad application of the *Philips* decision mean for existing pools which currently operate in both the U.S. and E.U.? In one word: mayhem. Administrative and judicial bodies in both countries are likely to be uncertain about how to handle antitrust issues involving these global pools which may already have been including non-essential patents in their licenses, or which now wish take advantage of the *Philips* decision and begin including non-essential patents. This could either lead to arbitrary dissolutions or approvals of these pools and their pooling practices, or their division into separate U.S. and E.U. "sub-pools." Both alternatives are likely to be costly and undesirable to all parties involved.

In summary, if the pool-watchers' fears actually materialize, technological industry standards will be much more slowly developed, and the incentive to innovate and combine technologies may gradually dissipate.

However, despite all these grim possibilities for patent pools and technology standards, it is unlikely that the application of the *Philips* decision will actually lead to such apocalyptic effects. In fact, pool-watchers are probably reading the *Philips* decision too broadly, despite the Federal Court's strong implications that its holding should be narrowly interpreted and that the analysis it employed (i.e. the rule of reason analysis) should be applied on a case by case basis.

C. *Pool-Watchers May Be Reading Philips Too Broadly*

The Federal Court's essentiality analysis partially demonstrates that it does not intend for its decision to promote anti-competitive tying. In rejecting the Commission's rule of reason analysis of the licensing arrangement at issue, the *Philips* court found that the Commission had made an incorrect determination that some of Philip's "essential" patents were "non-essential." The court stated that patents are "non-essential" only if *commercially feasible alternatives* to those patents exist.⁹⁸ "If there are no commercially practicable alternatives to the allegedly non-essential patents, packaging those patents together with so-called essential patents can have no anticompetitive effect in the marketplace, because no competition for a

98. *Philips*, *supra* note 17, at 1194.

viable alternative product is foreclosed.”⁹⁹ Since there was *insufficient evidence* of commercially feasible alternatives to the patents which the licensees claimed were non-essential, the Court found no anti-competition.

Overall, the court’s reasoning seemed to allow the inclusion of non-essential patents based only on the *specific* licensing circumstances at issue. As such, it is unreasonable to construe this court’s decision as broadly allowing non-essential patents to be included in licensing packages. In fact, some authors even agree that due to the fact-specific reasoning employed in *Philips*, “this should not be taken to signal that other ties will necessarily receive such a strong endorsement.”¹⁰⁰ Furthermore, in distinguishing between patent-to-patent tying arrangements, which were at issue in *Phillips*, and product-to-product arrangements, the Court clearly indicated that in contrary to the opinions of some authors,¹⁰¹ the per se rule regarding anti-competitive tying still exists. The main difference seems to be that the court no longer wishes to apply it to patent pooling/packaging arrangements which merely contain non-essential patents, simply because in these cases, under the rule of reason, the pro-competitive benefits of the pooling might well outweigh the perceived anti-competitive drawbacks.

Furthermore, while the *Philips* decision may increase the burden of those challenging patent pool licensing arrangements, it may also have the desirable effect of deterring frivolous and strategic challenges to these licensing arrangements, including those challenges which may be based on amorphous definitions of essentiality.¹⁰²

99. *Id.*

100. Nelson, *supra* note 60, at 558.

101. See, e.g., Homiller, *supra* note 23.

102. *Philips*, *supra* note 17, at 1196-97 (“[O]ver time, the development of alternative technology may raise questions whether some of the patents in the package are essential or whether, as in this case, there are alternatives available for the technology covered by some of the patents. Indeed, in a fast-developing field such as the one at issue in this case, it seems quite likely that questions will arise over time, such as what constitutes an ‘essential’ patent. . . Under the Commission’s approach, an agreement that was perfectly lawful when executed could be challenged as per se patent misuse due to developments in the technology of which the patentees are unaware, or which have just become commercially viable. Such a rule would make patents subject to being declared unenforceable due to developments that occurred after execution of the license or were unknown to the parties at the

D. *The Federal Circuit's Warning Message*

Some pool-watchers claim that in the *Philips* decision, the Federal Circuit “adopted an essentiality standard that encompassed both literal and commercial essentiality.”¹⁰³ It therefore appears the Federal Circuit has chosen one out of the many definitions of essentiality that were endorsed by the Department of Justice.¹⁰⁴ It is also important to note, however, that the Court also acknowledged that essentiality changes with time (especially given the fast progression of technology), and must therefore be determined at the time the licenses were executed (i.e. the time of transaction) and not at the time of litigation. This acknowledgement is noticeably missing from the DOJ’s Business Review Letters and may even symbolize a warning from the court that the essentiality analysis may have been done carelessly in previous antitrust assessments by the DOJ and other antitrust authorities. Here, the court is cautioning that when conducting essentiality analyses, administrative as well as judicial bodies must be aware that what was previously considered to be an essential technology or patent may no longer actually meet the earlier-employed definition of “essential,” and that continuing to include such a previously essential patent is not necessarily anti-competitive.¹⁰⁵

The message is clear: a case-by-case, detailed and cautious execution of the essentiality analysis under the rule of reason, including an awareness of the time-sensitive nature and elegance of essentiality itself, is the Federal Court’s preferred approach to the review of patent pool licensing arrangements.

The clarity of this message is exemplified by case law following the *Philips* decision. For example, in *Globespanvirata v. Texas Instrument, Inc.*,¹⁰⁶ the defendants were accused of unlawfully pooling patents for ADSL Standards Technology with

time of licensing. Not only would such a rule render licenses subject to invalidation on grounds unknown at the time of licensing, but it would also provide a strong incentive to litigation by any licensee, since the reward for showing that even a single license in a package was ‘nonessential’ would be to render all the patents in the package unenforceable.”).

103. HERBERT HOVENKAMP ET AL, IP AND ANTITRUST: An Analysis of Antitrust Principles Applied to Intellectual Property Law §34.4c2 (Supp. 2007).

104. See *supra* pp. 624-28.

105. See *supra* note 102.

106. *Globespanvirata, Inc. v. Tex. Instrument, Inc.*, 2006 U.S. Dist. LEXIS 8860 (D.N.J. March 3, 2006).

those for ASDL Non-Standards Technology. According to *Globespanvirata* (the Plaintiff), the market for ASDL non-standards technology was the market for *non-essential* features for compliance with ADSL standards, and these non-essential features were only good for enhancements related to efficiency.¹⁰⁷ As such, they argued that the defendants' tying of both types of technologies foreclosed potential competition for the licensing of the non-standard technology. In dismissing the case, the *Globespanvirata* court followed the *Philips* court's reasoning and held that the pooling arrangement at issue not per se anti-competitive.¹⁰⁸ In doing so, the *Globespanvirata* court joined the *Philips* court's push for a more case by case, rule of reason review of this type of pooling situation.

The same rationale was the basis of Federal Circuit's decision in *Philips v. Princo*.¹⁰⁹ Here, the court remanded the case for consideration in light of its decision in *Philips* as well as the Supreme Court's decision in *Illinois Tool Works*,¹¹⁰ mainly because the district court used the wrong standard (i.e. per se analysis) to assess the tying claim against Philips.¹¹¹

In addition to using a rule of reason standard for reviewing pool arrangements which include non-essential patents, courts deciding post-*Philips* cases have placed a heavy burden on the plaintiffs to show evidence supporting arguments based on essentiality. For example, in *Wuxi Multimedia v. Koninklijke*,¹¹² the plaintiff alleged that the defendant's DVD technology licensing arrangement was anticompetitive under the

107. *Id.* at 13.

108. *Id.* at 19-24.

109. *U.S. Philips Corp. v. Princo Corp.*, 173 Fed. Appx. 832 (Fed. Cir. 2006).

110. *Ill. Tool Works, Inc. v. Independent Ink, Inc.*, 547 U.S. 28 (2006). In *Illinois Tool Works*, the Supreme Court held that tying arrangements involving patented products should not be evaluated under a *per se* rule, and that "while some such arrangements are still unlawful, such as those that are the product of a true monopoly or a marketwide conspiracy, . . . that conclusion must be supported by proof of power in the relevant market rather than by a mere presumption thereof." *Id.* at 42-43. The court also caution that "[m]any tying arrangements, even those involving patents and requirements ties, are fully consistent with a free, competitive market." *Id.* at 45.

111. 173 Fed. Appx. 832, 835 (Fed. Cir. 2006).

112. *Wuxi Multimedia, Ltd. v. Koninklijke Electronics, N.V.*, 2006 U.S. Dist. LEXIS 9160 (S.D. Cal. Jan. 5, 2006).

rule of reason because it included non-essential patents. However, the Southern California District Court held that not only had the plaintiffs failed to identify which of the pooled patents were non-essential, but even if they had identified these patents, they had failed to provide sufficient facts to support their allegations that the patents were in fact non-essential.¹¹³

In summary, the above sample of post-*Philips* case law demonstrates that in contrary to the pool-watchers' opinions, the *Philips* decision does not broadly indicate that unfettered inclusion of non-essential patents will be tolerated in U.S. judicial and administrative review of patent pool licensing arrangements. Instead, the decision likely indicates a growing recognition by U.S. courts that the inclusion of non-essential patents in patent pools may sometimes have significant pro-competitive effects, and that therefore the rule of reason should prevail as the standard of review for these types of pools. Moreover, it serves as a much-needed message to antitrust authorities to acknowledge and adapt to the fragile, amorphous and evolving nature of "essential" when conducting evaluations of patent pool licensing arrangements.

E. *The Pro-Competitive Effects of Non-Essential Patents*

Even some of the pool-watchers themselves have noted that the presence of non-essential patents in licensing arrangements may have pro-competitive effects or even allay anticompetitive effects. For example, Philip B. Nelson¹¹⁴ has suggested that requiring parties to negotiate separately for non-essential patents may lead to a slower adoption of the associated technology, because parties wishing the use the pooled technology "may encounter higher costs than would have been the case if the patent pool had included at least one of the complementary 'non-essential' patents in the pool."¹¹⁵ Furthermore, like the Federal Circuit in *Philips*, he has also recognized that

[i]n a dynamic world, there is another problem with focusing on whether a pool contains only essential patents. It may be that patents which were essential at

113. *Id.* at 15.

114. Principal, Economists Incorporated, Washington, D.C. Ph.D. Yale University, formerly Assistant Director for Competition Analysis, FTC.

115. Nelson, *supra* note 60, at 567-68.

the time the patent pool was set up are no longer essential. Given this, a policy that focuses on whether patents in the pool are "essential" is a time sensitive analysis.¹¹⁶

He also notes that non-essential patents may also provide efficiencies if included in a patent pool, and that the potential to reap benefits from these efficiencies may give owners of the essential patents financial incentive to include the non-essential patents in the pool.¹¹⁷

Other authors have used everyday devices to illustrate their arguments that non-essential patents can be very valuable:

[A] substantial part of the buyers of mobile phones seems to attribute great value to [the] so-called predictive text input feature on GSM phones. This feature allows them to compose short text messages more easily. In order to market a successful phone, a manufacturer may feel that it needs to license that patent, even though the standard does not include this feature and the patent in question therefore has to be considered non-essential.¹¹⁸

As such, in the fallout of the *Philips* decision, and based on these acknowledgments of the pro-competitive benefits of non-essential patents, here in the U.S. we may soon witness an increased acceptance of patent pool licensing arrangement which include non-essential patents.

This does in fact indicate a departure from the stricter European standard for patent pool review, but the analysis above shows that this is not necessarily a negative move, especially since it creates the possibility of reaping significant pro-competitive benefits. From this perspective, it is even arguable that Europe should follow this emerging U.S. standard of reviewing patent pool licensing arrangements. However, some pool-watchers may caution that not all pool arrangements

116. *Id.* at 568.

117. *Id.*

118. Rudi Bekkers et al., *Patent pools and non-assertion agreements: coordination mechanisms for multi-party IPR holders in standardization*, at 5-6 (Aug. 23, 2006), available at <http://www2.unil.ch/easst2006/Papers/B/Bekkers%20Iversen%20Blind.pdf>.

which include non-essential patents will actually be pro-competitive.

No doubt, we must not forget that the presence of non-essential, substitute patents in patent pools can have very detrimental effects on competition. From this perspective, Europe may not wish to “jump into the pool” with the U.S. and its emerging trend of patent pool review. As such, we should take a look at whether the *Philips* decision is sufficiently far-reaching to spark a similar European approach to reviewing patent pool arrangements containing non-essential patents.

V.

IS THE *PHILIP*'S DECISION POWERFUL ENOUGH TO REACH ACROSS THE ATLANTIC?

Before the *Philips* case, some pool-watchers praised what seemed to be a growing convergence of the U.S. and European approaches to the relationship between antitrust and intellectual property law. As mentioned earlier, the U.S. *IP Guidelines* and the E.C. *TT Guidelines* actually do have many similarities¹¹⁹ and were both created with the same goal in mind: promoting and enforcing healthy technology competition, while preventing and/or mitigating anti-competitive effects. In fact, in 2004 the Department of Justice suggested that the E.U.'s adoption of a more economic effects-based model (similar to the *IP Guidelines*) for assessing intellectual property licensing would move these two nations towards more convergence.¹²⁰ In 2003, one author also stated that the European Commission's adoption of the TTBE¹²¹ represented a step in the continuing convergence of the U.S. and E.U. approaches.¹²² However, it is debatable whether this perceived

119. For example, both sets of guidelines generally view pools as pro-competitive mechanisms, and they favor pools which consist of complementary or blocking patents.

120. Markan Delrahim, Deputy Assistant Attorney Gen. Antitrust Div. U.S. Dep't of Justice, Remarks Presented at the American Bar Association Section of Antitrust Law Spring Meeting (Apr. 1, 2004), *available at* <http://www.usdoj.gov/atr/public/speeches/203228.pdf>.

121. Transfer Technology Block Exemption.

122. Willard K. Tom et al., *supra* note 42. Willard K. Tom was previously Deputy Director of the FTC's Bureau of Competition. Prior to joining the FTC, he was a member of the Antitrust Division Task Force that drafted the DOJ and FTC Antitrust Guidelines for the Licensing of Intellectual Property.

convergence actually and substantially includes the area of patent pools and their licensing practices. Indeed, as discussed earlier, the TTBE itself does not even cover patent pool licensing arrangements. Also, despite all the similarities between the *TT Guidelines* and the *IP Guidelines*, it is possible that there are conflicting policies underlying them which may have initiated an actual divergence between the two nations well before the Federal Court's decision in *Philips*. If this theory is true, *Philips* may very well be just another signal of an already growing difference in the ways that the U.S and the E.U. address technology licensing practices.

A. Why the "Philips Effect" May Reach Europe

Based on U.S. and European patent pooling history, it may not be surprising if the E.U. gradually adopts a more "*Philips-esque*" approach to patent pool licensing arrangements which include non-essential patents. After all, the *TT Guidelines* are heavily patterned after the DOJ/FTC *IP Guidelines*, and if the Federal Circuit's *Philips* approach is fully adopted by the DOJ and the FTC, European authorities are likely to follow suit. This effect is probably more likely in the case of major patent pools which are related to industries in which Europe has a major interest, such as the telecommunications industry.

For example, when the European Commission gave anti-trust clearance for the five 3G patent pool licensing arrangements in 2002,¹²³ its press release stated that "[a]s in the case of 3G network sharing, the Commission welcomes industry initiatives that accelerate the introduction of 3G mobile services for European customers. . . ."¹²⁴ The press release continued by enthusiastically declaring that "[t]he new 3G mobile technologies are expected to bring about a plethora of multimedia and high-speed voice and data services to mobile phone users."¹²⁵ Clearly, the European interest in this patent pool was (and remains) substantial. The Commission also made it clear that "clearance under the antitrust rules requires that each licensing agreement is limited to essential patents only. . . . Furthermore, 3G manufacturers should not be forced to pay for patent rights other than those that they really

123. See *supra* note 67.

124. *Id.*

125. *Id.*

need.”¹²⁶ Here, it is almost as if the European Commission was expressly forbidding the 3G pool to engage in licensing practices similar to those at issue three years later in the *Philips* case.

Nevertheless, the European Commission’s enthusiasm for the potential benefits of the 3G patent pool may have (albeit unintentionally) caused them to leave some flexibility in their clearance letter to account for the time-sensitive nature of the essentiality analysis. For example, the press release announcing the antitrust clearance also stated that “given the novelty of the different 3G technologies involved, any significant change in the factual or legal situation would require re-assessment of the arrangements under the competition rules.”¹²⁷ It would not be too far-fetched to assume that this re-assessment of the arrangements could be required if one or more of the so-called “essential” 3G patents was later challenged as “non-essential” and the integrity and legality of this highly-regarded pool was thus threatened.

Given the phenomenal pace at which mobile-phone technology progresses, such a challenge would hardly be unforeseeable. However, given the E.U.’s significant interest in the telecommunications industry, the European Commission’s enthusiastic endorsement of the 3G pool and the high global demand for mobile telecommunication devices, it is unlikely that the European Commission would hold this pool’s licensing practices to be per se anticompetitive if (for example) one of the previously “essential” patents was later categorized as “non-essential”. In fact, it is more likely that the Commission would adopt a more “rule of reason” approach to this situation (like the *Philips* court) and determine whether the pro-competitive benefits of the non-essential patented technology outweighs its anti-competitive effects. Under this scenario, the uninterrupted longevity of major pools such as the 3G pool is likely to be preserved in the E.U. Unfortunately, other pools which may have a significantly smaller economic impact might still be found per se anticompetitive if it is discovered that one of their previously “essential” patents is later found to be “non-essential”.

126. *Id.*

127. *Id.*

Even if this theory is not proven, the European Commission may nevertheless ultimately follow the *Philips* approach to pools which contain non-essential patents, due the gravity of some of the problems which may result from separate treatment of these patent pools on both sides of the Atlantic.¹²⁸ After all, a more convergent and consistent approach to patent pools which feed industries in both the U.S. and the E.U. is more preferable to pool members, licensees, consumers, and antitrust authorities than an uncertain assessment caused by divergent national policies.¹²⁹

B. *Possible Limitations to the Reach of the "Philips Effect"*

There remain very strong arguments that Europe most likely will not adopt the *Philips* approach, at least not in the foreseeable future. First of all, despite all their similarities, the *TT Guidelines* and the *IP Guidelines* ultimately were formed on different legal foundations, which may prevent total harmonization of the two sets of guidelines for many years to come. For example, one author has noted that

[t]he U.S. Guidelines focus on possible harm to inter-technology competition from licensing arrangements. The EC TTBER and Guidelines express concerns about loss of intra-technology competition as well as inter-technology competition. . . . The origin for these differences is the contrasting E.U. and U.S. antitrust laws. The former prohibits agreements that limit trade between Member States. The U.S. antitrust laws apply to interstate commerce, but do not have the promotion of interstate trade as a specific objective.¹³⁰

128. See, e.g., *supra* pp. 632-33.

129. A more convergent approach is more preferable since it gives all interested parties more notice and certainty of which types of licensing arrangements are likely to be approved or disapproved in either nation. Of course, a more convergent approach would also lessen administrative and judicial burdens, as well as allow pool members to conserve resources that may have otherwise been spent in litigation.

130. Richard Gilbert, *Converging Doctrines? US and EU Antitrust Policy for the Licensing of Intellectual Property* 13 (Competition Policy Ctr. Univ. of Cal. Berkeley, Working Paper No. CPC04-44, 2004), available at <http://repositories.cdlib.org/iber/cpc/CPC04-044/>. As Deputy Assistant Attorney General in the Antitrust Division, the author led a U.S. Department of Justice effort to

As such, it is arguable that the E.U., which is fundamentally more restrictive on trading/licensing practices than the U.S., might be reluctant to quickly abandon its equally strict requirement that patent pools contain only essential patents.

Considering the different legal foundations mentioned above, there is a sense that the E.U. may actually prefer to blaze its own path with respect to competition law and patent pool regulation, thereby refusing to follow the U.S. steps exactly.

However, the European Commission's opinions, approvals and reports on patent pools are publicized in press releases which, when compared to the detailed DOJ and FTC Business Review Letters, are scant of information detailing the Commission's reasoning. It is thus difficult to determine if this "sense" is much more than a mere assumption. Yet, given a) the notion that the E.C. *TT Guidelines* seem to have more force of law when compared to the U.S. *IP Guidelines*, and b) the influence of the different legal principles upon which the two nations' antitrust laws are based, there is a chance that this "sense" indicates an actual E.U. preference to maintain a somewhat separate technology licensing policy. If true, we may in fact witness a growing divergence between these two nations' approach to patent pools, but pool-watchers would be unable to claim that this divergence is due only (or even mainly) to the impact of the *Philips* decision.

C. *The Likely Result*

On balance, the influence of the *Philips* decision is probably not likely to spark a similar development in Europe. What *might* occur is an eventual normalization of U.S. and E.U. policy towards a patent pool approach which embodies a clearer standard by which patent pool licensing arrangements are assessed. This approach should i) place less emphasis on amorphous essentiality analyses and ii) create more awareness of the time-sensitive nature of any essentiality analysis. This approach should also place more emphasis in areas in the antitrust evaluation where detailed analysis is currently lacking, such as patent validity assessments.

develop guidelines for the licensing of intellectual property from 1993 until their publication in 1995.

For instance, when completing their analysis, one of the first steps that U.S. agencies take is to *presume* that all the patents in the pool will be valid.¹³¹ Clearly, this is a very risky presumption, since it is well-known that patent pools may strategically engage in the shielding of invalid patents. The apparent justification for this presumption is that on discovery of an invalid patent, the patent would be immediately removed from the pool and/or the pool would be struck down by the appropriate antitrust/competition review system. This justification is highly dependent on whether the pool is challenged in the first place. As such, this reactive approach likely causes much costly litigation that could be avoided if proper patent validity assessments are taken before the pool's formation. A better solution may be to employ independent experts to verify the validity of all patents destined for the pool, and to require the pool to set up a system which monitors and appropriately handles any patent which later becomes invalid. This may turn out to be a more costly option, but it is also likely to be a major litigation cost-saver in the long run.

VI.

CONCLUSION

The concerns of pool watchers are highly unlikely to dissipate until the full impact of the *Philips* decision has had more time to fully absorb into the U.S. antitrust system. As previously mentioned, though these concerns are well-grounded, we must remember that non-essential patented technologies can and do play a beneficial role in the world of competition law and patent pool licensing arrangements. As such, the *Philips* decision does not necessarily open the flood-gates for the unfettered use of non-essential patents and widespread foreclosure of competition in downstream markets. This however does not signify that the *Philips* decision should be considered as a minor event in the realm of patent pool licensing arrangements. In fact, this decision has emphasized the notion that the assessment of a patent pool's licensing practices should not rely too heavily on a time-sensitive essentiality analysis.

131. See, e.g., 3G Letter, *supra* note 62, at 9.

Furthermore, the *Philips* court, recognizing this time-sensitivity and the pro-competitive benefits of non-essential technology, has arguably triggered the evolution of the essentiality analysis itself. Some authors may respond that the *Philips* decision has left many questions open. Indeed, the decision may even represent another step away from the E.U. approach to patent pools. However, this single decision in and of itself does not preclude the possibility that both nations could eventually devise a much more convergent and consistent method for handling patent pool licensing arrangements. In fact, the *Philips* decision, in its apparently controversial nature, could possibly be the catalyst which propels antitrust authorities to more vigorously pursue this convergence.

