EVERYONE IN THE PATENT POOL:

U.S. PHILIPS CORP. v. INTERNATIONAL TRADE COMMISSION

By David W. Van Etten

When separate firms hold their patent rights together under joint management, they create package licenses, commonly known as patent pools. On the one hand, package licenses may benefit competition by efficiently integrating complementary patent rights owned by multiple firms. On the other hand, package licenses may hurt competition by foreclosing alternative technologies and retarding innovation. In an effort to capture the beneficial potential and discourage the harmful potential of package licensing, the U.S. Department of Justice (DOJ) approved a “patent-expert mechanism”: the DOJ did not prosecute a package license owner for antitrust violation if an independent and disinterested patent expert verified that the package license consisted solely of “essential” patents, to which there were no commercially viable alternatives. Accordingly, firms that employ a patent-expert mechanism safeguard themselves from federal antitrust prosecution. However, the patent-expert mechanism does not necessarily safeguard firms from a patent misuse defense in private litigation.

In U.S. Philips Corp. v. International Trade Commission, the United States Court of Appeals for the Federal Circuit reviewed an opinion by the International Trade Commission (ITC), which held a package license unenforceable due to patent misuse. The ITC held the package license to be patent misuse under a per se standard of review because the package license included “non-essential” patents. On appeal, the Federal Circuit confronted two legal issues surrounding package licenses: first, whether the ITC erred applying a per se standard rather than a rule of reason standard of review; and second, whether the ITC correctly distinguished be-

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1. “Patent pool” and “package license” are not necessarily coextensive categories. A single firm could license the rights to several of its own patents in a “package license” without combining its patents with another firm’s patents to establish a “patent pool”. However, for the sake of uniformity, I will be employing the terms interchangeably throughout this Note.


tween “essential” and “non-essential” patents when reviewing the package license. First, the Federal Circuit rejected the ITC’s use of a *per se* standard, holding that the rule of reason was the appropriate standard for reviewing package licenses, regardless of whether the package license included “non-essential” patents. Second, the Federal Circuit rejected the ITC’s determination of “non-essential” patents. Accordingly, the Federal Circuit reversed the ITC ruling and remanded for further proceedings.

This Note examines the implications of *Philips*, a decision that serves to restrict patent misuse doctrine and encourage patent pools. Part I frames the *Philips* discussion by outlining the legal background of package licenses and patent misuse doctrine. Part II reports the facts and procedural history of *Philips* and details the Federal Circuit’s holdings and reasoning. Part III analyzes the subtler implications of the Federal Circuit’s holdings: (1) how *Philips* implicitly holds that package licenses are inherently pro-competitive for purposes of the rule of reason analysis; (2) how *Philips* implicitly holds that “essentiality” is determined at the time of transaction, not at the time of litigation; (3) how *Philips* implicitly endorses the DOJ’s patent-expert mechanism; and (4) how *Philips* creates a heavy burden for licensees who argue the anticompetitive harms of a package license. Ultimately, this Note concludes that *Philips* creates a presumption that heavily favors the creation of, participation in, and enforcement of package licenses.

I. PACKAGE LICENSES AND PATENT MISUSE DOCTRINE

A. Package Licenses

1. Benefits and Harms

When separate firms combine their patent holdings together under joint management, they create package licenses, commonly known as patent pools. Package licenses promise transactional efficiency: it is easier, quicker, and cheaper to conduct transactions with one pool containing multiple patents than it is to transact individual patents separately. However, firms may potentially exploit package licenses for cartel-like ends that hurt consumers and unfairly harm competitors.4

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The transactional efficiency of package licenses leads to potential benefits. First, package licenses often serve to clear blocking patents and integrate complementary patents, thus resolving the "tragedy of the anti-commons." Imagine that firms A, B, C, and D each possess a patent that covers specific knowledge needed to manufacture widgets. The patents, taken separately, give their owners the right to exclude each other from making, using, and selling widgets. However, each firm does not have any affirmative right to make, use, and sell widgets unless it licenses the complementary patent rights from the other three firms. An anti-commons problem arises: too many entangled intellectual property rights (IPRs) obstruct the smooth functioning of a productive market. Pooling overcomes this thicket of entangled IPRs by creating one organizational unit of enabled teachings—the package license—thus clearing the exclusionary blocking rights. By joining the patent pool, A, B, C, and D contract out of their patents' statutory exclusionary rights and contract into cross-licenses that allow each firm to manufacture widgets. Certainly, the firms could form bilateral agreements: A contracts with B, A contracts with C, and so on. However, the package license consolidates the formidable transaction costs of multiple agreements, including the costs of associating, negotiating, and decision-making with competitors.

Second, package licenses may lead to unique efficiencies when industry standards are necessary or desirable. An industry standard—a common design for a product or process shared by all competitors in an industry—is necessary or desirable in network markets where there are sizable "network externalities" or "network effects," such as the computer networking and telecommunications industries. Network externalities exist

5. See Carlson, supra note 4, at 379-98. Besides clearing blocking patents and enhancing network interoperability, patent pools possess additional pro-competitive benefits. First, patent pools tend to facilitate the rapid development of technology, often hindered by patent disputes that are more likely to arise in atomized and un-pooled transactions. Second, patent pools reduce costly, time-consuming, and uncertain litigation: ex ante through pooling contracts, and ex post through cross-licensing settlements. Third, patent pools resolve uncertainties in the scope of patent claims, distribute risks among members of the pool, promote the success of smaller firms, and counter spillover effects.

6. Id. at 379; see also Michael Heller & Rebecca Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCIENCE 698 (1998) (discussing the anti-commons problem of clustered proprietary patent rights).


8. See Joseph Farrell & Garth Saloner, Standardization, Compatibility, and Innovation, 16 RAND J. ECON. 70 (1985); Michael Katz & Carl Shapiro, Network Externalities, Competition, and Compatibility, 75 AM. ECON. REV. 424 (1985); Mark A. Lemley & David McGo-
when the consumer derives benefits from every other consumer sharing the same network and network-related products. As Professor Mark Lemley explains,

[j]ust as the value of having a telephone increases from zero as more and more people are added to the network, so the value of being on the Internet increases as more people get on the Net. The implication of network effects in both markets is the same: the optimal number of both Internets and telephone networks is one.9

It is in the public’s best interest to have unified standards in network markets, in contrast to classic consumer markets where cereal-box-style product variety carries the day.

Package licenses clear blocking patents and enhance network interoperability because they serve to prevent the phenomenon of the “hold-up.” Imagine that consumers would benefit most from a network market consisting either entirely of widgets or entirely of gadgets. In fact, imagine that consumers suffer if two markets of widgets and gadgets exist, because—like VHS and Betamax video-recording systems—the network will eventually trend toward one market, either widgets or gadgets, and certain unfortunate consumers will be stuck with latter-day switching costs. In this hypothetical, firms A, B, and C pool their patent teachings together, which may serve to make both widgets and gadgets. Assume widgets and gadgets are equally innovative, consumer-friendly technologies. Imagine firm D owns the final complementary patent on widget development and is willing to join the patent pool, while firm E owns the gadget’s final complementary patent and is unwilling to join the pool. Consumers are best served if firms A, B, and C invite firm D into the patent pool and collectively drive widget development as the ultimate industry standard. Conversely, if the standard tips toward gadgets firm E would possess a patent that covers the common design for the industry’s core product or process, encouraging firm E to engage in “hold-up” behavior: holding the entire industry hostage to its bargaining demands, inefficiently increasing market prices and hindering future product development. Ac-

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cordingly, consumers benefit enormously if a package license exists and contains all the patents that are relevant to the network standard.\textsuperscript{10}

While package licenses have the beneficial potential to clear blocking patents and enhance network interoperability, package licenses also carry the potential to hurt consumers or unfairly harm competitors. First, firms hurt consumers when they use package licenses to collectively fix prices or coordinate output restrictions.\textsuperscript{11} Second, package licenses hurt consumers when they retard innovation by discouraging participating firms from conducting research that would displace the existing standard.\textsuperscript{12} Meanwhile, firms unfairly hurt their competitors when they exclude them from joining the pooling arrangement or from the benefits of cross-licensing enjoyed by other firms. Finally, returning to the issue of network standards, firms hurt both consumers and competitors when they use a package license to drive a standard that is less innovative and less customer-friendly than an existing alternative being promoted by a competitor. In short, firms that participate in patent pool arrangements have incentives to engage in anticompetitive behavior that adversely affects the market.


The mixed blessing of patent pools has in the past made the DOJ wary. The DOJ demonstrated a general hostility toward package licenses in the 1960s and 1970s.\textsuperscript{13} The DOJ considered package licenses to be one of its "nine no-nos" of plainly anticompetitive behavior, deserving targeted enforcement.\textsuperscript{14} However, the DOJ's treatment of package licenses shifted during the Reagan Administration. The DOJ's Roger B. Andewelt expressed in 1984, "[b]ecause of the important pro-competitive benefits that can result from patent pools, \textit{per se} condemnation is inappropriate."\textsuperscript{15} Finally, in 1995, the DOJ and the Federal Trade Commission issued "Antitrust Guidelines for the Licensing of Intellectual Property" ("IP Guidelines"), explicitly recognizing the pro-competitive benefits of pooling arrangements that "integrat[e] complementary technologies, reduc[e] trans-

\begin{enumerate}
\item See, e.g., Lemley, \textit{supra} note 7 (discussing standard-setting organizations as an alternative organizational model for achieving the patent pool's aims).
\item See \textit{IP GUIDELINES, supra} note 4, at 28.
\item \textit{Id.}
\item \textit{Id.}
\item Roger B. Andewelt, \textit{Analysis of Patent Pools under the Antitrust Laws}, 53 AN-
\end{enumerate}
action costs, clear[] blocking positions, and avoid[] costly infringement litigations."\textsuperscript{16}

In 1998, the DOJ published a business review letter approving a patent-expert mechanism for package licenses that would be acceptable to the DOJ and would prevent antitrust prosecution.\textsuperscript{17} The three firms seeking the DOJ’s advice—Philips, Sony, and Pioneer (collectively “the Licensors”)—were interested in combining their separate patent rights into a package license for purposes of manufacturing DVDs. The Licensors proposed the following patent-expert mechanism: the package license would be composed solely of patents that were “essential” to compliance with the established industry standard; by “essential,” the Licensors meant that there were no commercially viable alternative technologies on the market.\textsuperscript{18} As a show of good faith, the Licensors proposed verification of the “essentiality” of each patent included in the package license by an independent and disinterested patent expert. Further, the Licensors proposed assurances that the expert’s interests were sufficiently insulated to qualify as independent and disinterested.\textsuperscript{19}

In its analysis, the DOJ business review letter addressed “(i) whether the proposed licensing program [was] likely to integrate complementary patent rights and (ii), if so, whether the resulting competitive benefits [were] likely to be outweighed by the competitive harm posed by other aspects of the program.”\textsuperscript{20} The DOJ was content that the first prong of its analysis was satisfied by the proposed expert-mechanism: “so long as the patent expert applied this criterion scrupulously and independently, it [was] reasonable to expect that the [package license would] combine complementary patent rights while not limiting competition between them and other patent rights for purposes of licensed applications.”\textsuperscript{21} The DOJ, addressing the second prong, held that the package license did not foreclose competition in related markets, nor did it pose a risk to future innovation by discouraging the Licensors from continuing standard-related research and development. Accordingly, the DOJ sanctioned the Licensor’s patent-expert mechanism as a successful safeguard against antitrust violations. Although not binding authority in subsequent disputes, the business review letter persuasively suggests how the DOJ might address factually analogous package licenses.

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{16} IP GUIDELINES, supra note 4, § 3.4, at 16.
  \item \textsuperscript{17} Business Review Letter, supra note 2.
  \item \textsuperscript{18} Id.
  \item \textsuperscript{19} Id.
  \item \textsuperscript{20} Id.
  \item \textsuperscript{21} Id.
\end{itemize}
\end{footnotesize}
However, while it functioned as a dependable safeguard against antitrust prosecution by the DOJ, the patent-expert mechanism did not necessarily safeguard against the claim of patent misuse in private litigation—an issue central to Philips.

B. Patent Misuse: Two Standards of Review

Patent misuse is a judicially created doctrine, establishing an equitable and affirmative defense for patent infringers when patentees have "misused" their patent rights. If successfully argued, the defense may render an opposing party's patent rights unenforceable. The rationale behind patent misuse doctrine, generally, is to prevent unfair market behavior, barring patentees from leveraging their patent rights to obtain unrelated market benefits. The federal government grants a limited monopoly through patent rights: limited in time to the patent's twenty-year duration and limited in scope to the patent's claims. Patent misuse doctrine ensures that a patent owner does not extend his monopoly unfairly beyond the bounds of that limited time and scope.

The patent misuse doctrine has two potential standards of judicial review: the rule of reason standard and the per se standard. Most intellectual property licensing arrangements should be evaluated under the rule of reason. The Supreme Court advises a two-step process for analyzing a licensing arrangement under the rule of reason: first, inquire whether the restraint is likely to have anticompetitive effects; and second, inquire whether the restraint is reasonably necessary to achieve pro-competitive benefits that outweigh its anticompetitive effects. The rule of reason is an equity-balancing standard, where pro-competitive benefits are weighed against anticompetitive harms. The Federal Circuit has held that a licensing arrangement is impermissible only if its effect is to restrain competition in a relevant market, under the rule of reason.

The second standard—the per se standard—is reserved only for intellectual property licensing arrangements that demonstrate plainly anticompetitive behavior. Certain transactions, by their very nature, carry a high likelihood of creating anticompetitive harm in the market, and therefore

22. See 6 DONALD S. CHISHUM, CHISHUM ON PATENTS § 19.04 (2005). Congress has limited the scope of patent misuse doctrine with 35 U.S.C. § 271. However, the statutory limitations are not relevant for the purposes of this Note.
24. IP GUIDELINES, supra note 4, § 3.4, at 16.
25. See FTC v. Ind. Fed'n of Dentists, 476 U.S. 447 (1986); 7 PHILIP E. AREEDA, ANTITRUST LAW § 1502 (1986); IP GUIDELINES, supra note 4, § 3.4, at 16.
have been singled out as per se illegal. The Supreme Court has said "[c]ertain types of contractual arrangements are deemed unreasonable as a matter of law."\(^\text{27}\) In *Virginia Panel Corp. v. MAC Panel Corp.*, the Federal Circuit identified two types of patent transactions that constitute per se patent misuse.\(^\text{28}\) First, there are the "arrangements in which a patentee effectively extends the term of its patent by requiring post-expiration royalties."\(^\text{29}\) In other words, the patent owner extends the patent monopoly beyond the statutorily limited duration of twenty years. Second, there are patent-to-product arrangements, the "so-called tying arrangements in which a patentee conditions a license under the patent on the purchase of a separable, staple good."\(^\text{30}\) In other words, the patent owner extends the limited monopoly beyond the scope of the patent's claims. However, if a particular transaction has not been specifically deemed per se illegal, it should be analyzed under the rule of reason.

II. **U.S. PHILIPS CORP. V. INTERNATIONAL TRADE COMMISSION**

In *Philips*, the Federal Circuit ruled in favor of patentee Philips, reversing the district court's holding of patent misuse and remanding for further proceedings.\(^\text{31}\)

A. **Facts and Procedural History**

Compact-disc technology is a network market in which consumers benefit if there are unified standards. Accordingly, Philips and Sony—two competitor firms in the CD-technology industry—pushed the adoption of a standard called the Recordable CD Standard (the "Orange Book").\(^\text{32}\) The Orange Book included technical compliance standards for the production of recordable and rewritable CDs. Philips, Sony, Taiyo Yuden, and Ricoh pooled their separate patent properties so they could be jointly managed and sold as package licenses, with the royalties split pro rata by the participating firms. Philips created four different package licenses: one package with patents covering recordable CD technology owned by Philips alone, and one package for recordable CD technology with patents owned by Philips and others; one package with patents covering rewritable CD tech-


\(^{28}\) Virginia Panel Corp. v. MAC Panel Corp., 133 F.3d 860, 869 (Fed. Cir. 1997).

\(^{29}\) Id.

\(^{30}\) Id. at 868-69.


\(^{32}\) Id.
nology owned by Philips alone, and one package for rewriteable CD technology with patents owned by Philips and others. Philips included an additional option with each package: a customer could choose to purchase all relevant patents, or only "essential" patents with no commercially viable substitute. However, customers could not choose to license individual patents; if they wanted to practice recordable CD teachings, for instance, they had to license all of the related patents necessary to practicing the Orange Book standard.\textsuperscript{33} Philips used an independent patent expert to confirm that each patent was "essential," in accordance with the DOJ’s advice to package licensors who wish to safeguard themselves from antitrust violations.\textsuperscript{34}

Philips entered into package license agreements with Princo, GigaStorage, and Linberg (collectively the "Customers"). Shortly after formalizing the package license agreements, the Customers stopped paying their licensing fees. Consequently, Philips filed suit in the International Trade Commission (ITC), claiming that the Customers imported CDs that infringed six of Philips’ patents.\textsuperscript{35} During the proceedings, the Customers raised patent misuse as an affirmative defense, claiming that Philips’ package licenses included four "non-essential" patents because commercially viable alternative technology existed as a substitute for those four patents. Thus, the Customers argued that Philips leveraged essential patents to force the Customers to license non-essential patents, and this constituted patent misuse.\textsuperscript{36} One of the ITC’s administrative law judges (ALJs) ruled that the Customers had in fact infringed claims of six of Philips’ patents. However, the ALJ ruled that the six patents were unenforceable due to Philips’ patent misuse.\textsuperscript{37}

On Philips’ petition for review, the full board of the ITC affirmed the ALJ’s holding of patent misuse. The ITC based its holding in the alternative on both the \textit{per se} standard and the rule of reason standard.\textsuperscript{38} The ITC found patent misuse according to the \textit{per se} standard because Philips’ package license constituted a "tying arrangement," analogous to block-booking arrangements that tie valuable copyrights to inferior copyrights in mandatory packages.\textsuperscript{39} Philips, according to the ITC, tied patents that were

\textsuperscript{33} Id.
\textsuperscript{34} See Business Review Letter, \textit{supra} note 2.
\textsuperscript{35} Philips, 424 F.3d at 1183.
\textsuperscript{36} Id.
\textsuperscript{37} Id.
\textsuperscript{38} Id.
\textsuperscript{39} Id.; \textit{see also} United States v. Paramount Pictures, Inc., 334 U.S. 131, 156-59 (1948) (condemning block-booking sales to movie theaters under the \textit{per se} standard);
essential to practicing the Orange Book standard to non-essential patents. Four patents—the Farla, Iwasaki, Yamamoto, and Lokhoff patents—were non-essential because there existed commercially viable alternatives in the market.\textsuperscript{40} However, the ITC took no position on the ALJ’s ruling that the package license constituted \textit{per se} patent misuse on theories of price fixing and price discrimination. The ITC, alternatively, found patent misuse under the rule of reason standard because the anticompetitive effects of including non-essential patents in the package licenses outweighed the procompetitive benefits.\textsuperscript{41} Philips’ package licenses, the ITC reasoned, foreclosed alternative technologies and injured the competitors who sought to license alternative technologies.\textsuperscript{42} However, the ITC took no position on the ALJ’s finding under rule of reason analysis that the package license’s royalty structure constituted an unreasonable restraint on competition.\textsuperscript{43}

\textbf{B. The Federal Circuit’s Holdings and Reasoning}

The Federal Circuit reversed the ITC’s ruling on Philips’ patent misuse, addressing and rejecting each of the Commission’s alternative holdings: Philips’ package license did not constitute patent misuse under the \textit{per se} standard nor did the package license constitute patent misuse under the rule of reason.\textsuperscript{44}

\textit{1. The Per Se Standard of Patent Misuse is Inappropriate for Package Licenses}

The Federal Circuit rejected the ITC’s holding of patent misuse under the \textit{per se} standard as both legally flawed and factually unjustified.\textsuperscript{45} The ITC’s \textit{per se} holding was legally flawed, first, because it was unsupported

\begin{itemize}
  \item United States v. Loew’s, Inc., 371 U.S. 38, 44-51 (1962) (condemning block-booking sales to television stations under the \textit{per se} standard).
  \item Philips, 424 F.3d at 1184.
  \item \textit{Id}.
  \item \textit{Id}.
  \item \textit{Id}.
  \item \textit{Id}.
  \item The Federal Circuit called attention to \textit{Illinois Tool Works, Inc. v. Independent Ink, Inc.}, which had been recently granted \textit{certiorari}. Specifically, the court stated that “[i]t is possible that the Supreme Court’s decision in that case will offer some guidance with respect to the patent misuse issue presented in this case.” \textit{Philips}, 424 F.3d at 1193 n.6. After the Federal Circuit’s \textit{Philips} decision, the Supreme Court has, indeed, clarified patent misuse doctrine, shifting the evidentiary burden of proving a patent misuser’s market power to the complaining parties. \textit{See} \textit{Ill. Tool Works, Inc. v. Indep. Ink, Inc.}, 126 S. Ct. 1281 (2006); Puneet V. Kakkar, \textit{Note, Still Tied Up: Illinois Tool Works v. Independent Ink}, 22 BERKELEY TECH. L.J. 47 (2007).
  \item The Federal Circuit begins its analysis by sustaining the ITC’s ruling that Philips has market power and therefore does not achieve “safe harbor” under the Congressional exception to the patent misuse defense in 35 U.S.C. § 271(d). \textit{Philips}, 424 F.3d at 1186.
\end{itemize}
by precedent and, second, because it went against sound economic reasoning.\textsuperscript{46}

First, the Federal Circuit rejected and distinguished the Supreme Court's block-booking precedents, \textit{United States v. Loew's, Inc.} and \textit{United States v. Paramount Pictures, Inc.}, upon which the ITC based its holding.\textsuperscript{47} Block-booking is when a distributor only licenses a valuable Hollywood film on the condition that customers simultaneously license other inferior films. Philips' package license, consisting entirely of patents, was an entirely different intellectual creature than block-booking packages, which consisted entirely of copyrighted works. First, the block-booking package in \textit{Loew's} required customers to exhibit all of the films bundled in the package.\textsuperscript{48} Second, the block-booking package in \textit{Paramount}, charged a fee not only for the valuable film, but also for the inferior film.\textsuperscript{49} Philips' package license, unlike \textit{Loew's}, did not require customers to do anything with the allegedly non-essential patents; customers were not required to use the patents nor were they prohibited from using commercial alternatives.\textsuperscript{50} Instead, the patent license was simply a promise from Philips not to sue. Second, unlike \textit{Paramount}, there was no evidence that any portion of the royalties from Philips' package license stemmed from the questionably non-essential patents. On the contrary, the evidence strongly suggested that Philips charged a flat royalty regardless of the inclusion or exclusion of the allegedly non-essential patents.\textsuperscript{51} Thus, when the ITC used a \textit{per se} standard based on block-booking precedent, its holding was legally flawed.

Second, the ITC's use of a \textit{per se} standard was flawed according to sound economic reasoning. Sound economic reasoning suggests that package licenses—even package licenses that include non-essential patents—are not \textit{plainly} anticompetitive. Package licenses are not plainly anticompetitive because they do not automatically, nor are they likely to, leverage essential patents to force the license of non-essential patents. Instead, according to the Federal Circuit, "the value of any patent package is based largely, if not entirely, on the patents that are essential to the technology in question."	extsuperscript{52} "It is entirely rational for a patentee who has a patent that is essential to particular technology, as well as others that are not essential,

\begin{itemize}
\item\textsuperscript{46} \textit{Id.} at 1187.
\item\textsuperscript{47} \textit{Id.}
\item\textsuperscript{48} 371 U.S. 38 (1962).
\item\textsuperscript{49} 334 U.S. 131 (1948).
\item\textsuperscript{50} \textit{Id.} at 1188.
\item\textsuperscript{51} \textit{Id.}
\item\textsuperscript{52} \textit{Id.} at 1191.
\end{itemize}
to charge what the market will bear for the essential patent and to offer the others for free.”

Package licenses are also not plainly anticompetitive because they generally carry unique pro-competitive benefits. Philips introduced evidence showing that package licensing generally reduced transactions costs, obviated potential patent disputes, unified calculations, and reduced the degree of uncertainty associated with investment decisions. The Federal Circuit referenced the DOJ’s IP Guidelines as further support that package licenses carry unique pro-competitive benefits. Thus, according to the Federal Circuit, the ITC’s holding of patent misuse under the *per se* standard was legally flawed according to both precedent and sound economic reasoning. Even if Philips’ package license *did* include non-essential patents, the *per se* standard was inappropriate.

The Federal Circuit also rejected the ITC’s holding of patent misuse under the *per se* standard as unjustified by the facts of the case. The ITC’s holding was unjustified by the facts, first, because Philips’ package license included no “non-essential” patents, as the term “non-essential” is generally understood; and second, because the ITC employed an incorrect time-frame to determine the distinction between essential and non-essential patents.

First, Philips’ package license included no “non-essential” patents, as “non-essential” is generally understood, because the evidence did not show commercially viable alternatives for the Farla, Iwasaki, Yamamoto, and Lokhoff patents. In this case, the Customers failed to show that commercially viable alternatives to these patents—realistic, practical alternatives—existed in the market. According to the Federal Circuit, the Customer’s expert testimony by Dr. Laughlin from Calimetrics failed to carry the customer’s evidentiary burden. The expert testimony established that Calimetrics had an alternative technology for the Farla and Iwasaki patents, but did not establish that the customers had any interest in the Calimetrics alternative. Dr. Laughlin could “conceive” of alternatives to the Yamamoto patent, and was familiar with “research” into alternatives to the Lokhoff patent. According to the Federal Circuit’s reasoning, however, none of these “alternatives” reached the requisite level of commercial viability.

53. *Id.*
54. *Id.* at 1192
55. *Id.* at 1192-93.
56. *Id.; see also IP GUIDELINES, supra* note 4, § 5.5, at 28.
57. *Philips,* 424 F.3d at 1194-96.
58. *Id.*
Second, the ITC employed the incorrect timeframe to determine the distinction between essential and non-essential patents, as the Federal Circuit expressed in dictum near the end of Philips.\textsuperscript{59} The ITC understood “non-essential” to mean commercially viable alternatives at the time of litigation. The Federal Circuit questioned the wisdom of such hindsight analysis:

\begin{quote}
Under the ITC’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 [were] unaware, or which ha[d] just become commercially viable. Such a rule would make [the package license] subject to being declared unenforceable due to developments that occurred after the execution of the license or were unknown to the parties at the time of licensing.\textsuperscript{60}
\end{quote}

In short, the essentiality of a patent could shift with time.\textsuperscript{61} Accordingly, the Federal Circuit rejected the ITC’s understanding of “non-essential” with regards to timing: it is inappropriate to demonstrate commercially viable alternatives at the time of litigation.\textsuperscript{62}

C. The Package License Was Not Patent Misuse Under the Rule of Reason Standard

Finally, the Federal Circuit rejected the ITC’s alternative holding of patent misuse under the rule of reason standard. According to the Federal Circuit, the ITC’s rule of reason analysis was flawed for three reasons.\textsuperscript{63} First, the ITC’s ruling was predicated on its incorrect determination that commercially viable alternatives existed, rendering the Farla, Iwasaki, Yamamoto, and Lokhoff patents “non-essential.” Second, the ITC failed to acknowledge the pro-competitive benefits and unique efficiencies of Philips’ package license. Third, the ITC failed to acknowledge the anticompetitive harms and inefficiencies that would beset Philips if it was forced to license patents individually, or forced to constantly revise its package li-

\textsuperscript{59} Id. at 1196-97.
\textsuperscript{60} Id. at 1197.
\textsuperscript{61} Id. ("[T]he line between competitive patents and blocking or complementary patents is frequently very difficult to draw.") (quoting Andewelt, supra note 15, at 616).
\textsuperscript{62} The Federal Circuit, however, stopped short of explicitly endorsing the other logical understanding of “non-essential”: commercially viable alternatives at the time of transaction. This Note further pursues the issue of timing in Part III.
\textsuperscript{63} Philips, 424 F.3d at 1198. Since the Federal Circuit mostly disputes the appropriateness of the per se standard, the rule of reason section is brief and based on reiterated arguments.
licenses according to changing technology and shifting commercial alternatives.\(^\text{64}\)

Accordingly, the Federal Court reversed the ITC’s ruling on patent misuse—rejecting the holding based on the *per se* standard as well as the rule of reason standard—and remanded the case back to the ITC.\(^\text{65}\)

### III. IMPLICATIONS OF *PHILIPS*

*Philips* explicitly clarified the appropriate standard of review for package licenses. First, *Philips* rejected the *per se* standard of review, taking away the defendant-friendly standard for establishing a patent misuse defense. Second, *Philips* embraced the rule of reason as the appropriate standard for reviewing package licenses, balancing a package license’s pro-competitive benefits against its anticompetitive harms. This Note argues that the Federal Circuit decision in *Philips* creates a presumption in favor of enforcing package licenses for three reasons: (1) the court implies that package licenses are inherently pro-competitive for purposes of the rule of reason analysis; (2) based on the court’s reasoning, licensors can easily avoid anticompetitive harms before litigation using the patent-expert mechanism; and (3) the case sets precedent that licensees carry a heavy burden establishing anticompetitive harms *ex post*.

#### A. Package Licenses Are Inherently Pro-Competitive For Purposes of the Rule Of Reason Analysis

Package licenses are inherently pro-competitive because a licensor bears no burden to demonstrate the pro-competitive benefits of its *particular* package license. Instead, under the Federal Circuit’s reasoning, a licensor can rely on the *general* recognition of the pro-competitive benefits of package licenses. In *Philips*, the licensor introduced four pieces of evidence about package licensing—generally speaking—that the Federal Circuit deemed adequate to fulfill its evidentiary burden. First, “*Philips* introduced evidence that package licensing reduces transaction costs by eliminating the need for multiple contracts and reducing licensors’ administrative and monitoring costs.”\(^\text{66}\) This evidence of reduced transaction costs was supported with federal precedent.\(^\text{67}\) Second, *Philips* showed “[p]ackage licensing can also obviate any potential patent disputes be-

\(^{64}\) *Id.*

\(^{65}\) *Id.* at 1198-99.

\(^{66}\) *Id.* at 1193.

\(^{67}\) See *id.* at 1192 (citing Texas Instruments, Inc. v. Hyundai Elecs., 49 F. Supp. 2d 893, 901 (E.D. Tex. 1999) (describing how patent portfolios are preferable to the “extremely expensive and time-consuming” process of managing individual patents)).
tween a licensor and licensee and thus reduce the likelihood that a patentee will find itself in costly litigation." 68 This evidence of reduced legal uncertainty was supported with a law review article. 69 Third, Philips presented evidence that package licenses allow parties to establish pricing on general estimates of the value of technologies, rather than calculations of the marginal benefit of each patent. This evidence, arguably, was supported by particular fact-finding. 70 Fourth, and finally, Philips relied on the DOJ’s recognition of the unique pro-competitive benefits of package licenses in its IP Guidelines, which credited the licenses with “integrating complementary technologies, reducing transaction costs, clearing blocking patents, and avoiding costly infringement litigation.” 71 The Federal Circuit recognized the “unique pro-competitive benefits associated with package licensing” in general—and the licensors bore no burden to establish those pro-competitive benefits in particular.

Accordingly, this Note concludes that Philips implies that package licenses are inherently pro-competitive, for purposes of the rule of reason analysis.

B. Licensors Can Easily Avoid A Package License’s Anticompetitive Harms Ex Ante

The anticompetitive harms of package licenses, this Note argues, can be easily avoided ex ante through the patent-expert mechanism endorsed in the DOJ’s business review letter for purposes of avoiding antitrust violations. 72 The patent-expert mechanism is a procedure employed by patent owners during the creation of package licenses, whereby an independent expert verifies the inclusion of solely essential patents. 73 The Federal Circuit did not explicitly endorse the patent-expert mechanism. However, this Note argues that Philips can be reasonably read to implicitly endorse the patent-expert mechanism.

The Federal Circuit explicitly rejected the hindsight analysis, which determined “non-essential” patents according to commercially viable alternatives at the time of litigation. 74 Hindsight analysis would lead to legal uncertainty. Package licenses consisting entirely of “essential” patents at

68. Id. at 1192-93.
69. Id. at 1193 (citing Carlson, supra note 6, at 379-81).
70. See id. at 1991 (finding that “the royalty rate under Philips’ package licenses depended on the number of discs... not the number of individual patents”).
71. Id. at 1192 (citing IP GUIDELINES, supra note 4, § 5.5, at 28).
73. Id.
74. Philips, 424 F.3d at 1197.
the time of transaction, would be subject to invalidation according to later developments in commercial technology.\textsuperscript{75} Further, hindsight analysis would create perverse incentives for litigation. If a licensee can demonstrate that even one of a package license's patents has become "non-essential" due to market changes, a court would invalidate the entire package license according to patent misuse doctrine.\textsuperscript{76} The Federal Circuit did not simply reject hindsight analysis; the Federal Circuit opinion can reasonably be read to hold that \textit{transactional analysis} is appropriate for determining the essentiality of patents in a package license. In other words, courts should look to "essential" and "non-essential" distinctions according the commercially viable alternatives \textit{at the time of transaction}—not at the time of litigation. Accordingly, licensors bear the burden of proving that its package license consisted entirely of essential patents at the time of transaction—which, under the DOJ framework, can be accomplished by a patent-expert mechanism.

It is unclear whether the Federal Circuit endorses the DOJ's patent-expert mechanism. On the one hand, the Federal Circuit's failure to explicitly address the patent-expert issue suggests it does not endorse the mechanism. In an amicus brief, the Intellectual Property Owners Association ("IPOA") raised an argument in favor of a "good-faith process" closely resembling the DOJ's patent-expert mechanism, and the Federal Circuit did not address the argument explicitly. The IPOA argued,

\begin{quote}
there should be a threshold inquiry as to whether the licensors of the package have instituted a good-faith process to avoid tying non-essential patents to essential patents.\ldots The hiring of an objective, independent expert to assess the essentiality of the patents, along with the adequate support and resources for the expert, should be found to constitute a good-faith process and should preclude a finding of misuse.\textsuperscript{77}
\end{quote}

The Federal Circuit had an opportunity to explicitly address the amicus argument and did not.

On the other hand, the Federal Circuit's policy reasoning suggests that it \textit{implicitly} endorses the DOJ's patent-expert mechanism. The Federal Circuit's primary policy concerns—with regards to "essentiality" determinations—are the dangers of legal uncertainty and perverse incentives to

\begin{notes}
\item Id.
\item Id.
\end{notes}
litigate. The patent-expert mechanism is an apt and appropriate procedure that licensors could use to safeguard themselves against future litigation; more importantly, the patent-expert mechanism is a procedure that licensors already use to safeguard themselves against antitrust litigation. Thus, if the Federal Circuit rejected the DOJ’s patent-expert mechanism as inadequate proof of “essentiality,” it prudentially would have said so. Saying nothing suggests that the Federal Circuit endorses the pre-existing and widely-practiced safeguard of the patent-expert mechanism.

Accordingly, this Note concludes, first, that Philips implies that “essentiality” is determined at the time of transaction, not at the time of litigation. Second, this Note concludes that the Federal Circuit implicitly endorses the DOJ’s patent-expert mechanism.78

C. Licensees Carry A Difficult Burden Establishing A Package License’s Anticompetitive Harms Ex Post

Even if licensors do not employ a patent-expert mechanism and do not verify the “essentiality” of the patents in their package license, the odds are still in their favor. Licensees, according to the Federal Circuit’s logic, carry a heavy burden when they attempt to establish the anticompetitive harms of a package license. Specifically, a licensee must prove there were commercially available alternatives to the disputed patents.79 However, it is not enough for licensees to establish that alternatives were conceivable, being researched, or on the horizon. Further, it is not enough for licensees to establish that alternatives existed in the marketplace. Instead, the Federal Circuit requires licensees to prove that they would have pursued particular alternatives had it not been for the package licensee: “[Dr. Laughlin’s expert testimony] did not show that the Calimetrics technology was an alternative that Philips’ licensees wished to use in place of the technology covered by the Farla and Iwasaki patents.”80 Thus, licensees would have to pursue more expensive, time-consuming, and uncertain litigation to demonstrate with a degree of particularity that they not only knew of commercial alternatives, but would have pursued the commercial alternative if they were not locked into the package license in dispute.

Accordingly, this Note concludes that Philips creates a heavy burden for licensees arguing the anticompetitive harms of a package license.

78 See Business Review Letter, supra note 2.
79 Philips, 424 F.3d at 1194.
80 Id. at 1195.
IV. CONCLUSION

Philips, foremost, clarified that the rule of reason standard, and not the per se standard, is the appropriate standard of judicial review for disputes involving package licenses, commonly known as patent pools. Philips implies that package licenses are inherently or generally pro-competitive for purposes of the rule of reason analysis, regardless of their factual particulars. Further, Philips implies that the “essentiality” of a patent is determined at the time of transaction, not at the time of litigation; and the Federal Circuit implicitly endorses the DOJ’s patent-expert mechanism as an appropriate procedure for establishing the essentiality of patents at the time of transaction and safeguarding against future litigation. Finally, Philips creates a heavy burden for licensees arguing the anti-competitive harms of a package license because licensees must prove they would have used commercially viable alternative technology, available at the time of the package license’s transaction, with considerable particularity. Ultimately, this Note concludes that Philips heavily favors the creation of, participation in, and enforcement of package licenses: everyone in the patent pool, because Philips gives patent pools remarkable legal protections.