

**United States Court of Appeals
for the Federal Circuit**

**PRINCO CORPORATION AND PRINCO AMERICA
CORPORATION,**
Appellants,

v.

INTERNATIONAL TRADE COMMISSION,
Appellee,

AND

U.S. PHILIPS CORPORATION,
Intervenor.

2007-1386

On appeal from the United States International Trade
Commission in Investigation No. 337-TA-474.

Decided: August 30, 2010

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Before RADER, *Chief Judge*,* NEWMAN, MAYER, LOURIE, BRYSON, GAJARSA, LINN, DYK, PROST, and MOORE, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* BRYSON, in which *Chief Judge* RADER and *Circuit Judges* NEWMAN, LOURIE, LINN, and MOORE join.

Concurring opinion filed by *Circuit Judge* PROST, in which *Circuit Judge* MAYER joins.

Dissenting opinion filed by *Circuit Judge* DYK, in which *Circuit Judge* GAJARSA joins.

* Randall R. Rader assumed the position of Chief Judge on June 1, 2010. Judge Mayer took senior status on June 30, 2010. Judge Michel, who retired on May 31, 2010, did not participate in this decision.

BRYSON, *Circuit Judge*.

This case requires us to consider the scope of the doctrine of patent misuse. Patent misuse developed as a non-statutory defense to claims of patent infringement. In the licensing context, the doctrine limits a patentee's right to impose conditions on a licensee that exceed the scope of the patent right. Because patent misuse is a judge-made doctrine that is in derogation of statutory patent rights against infringement, this court has not applied the doctrine of patent misuse expansively. In this case, we adhere to that approach, and we sustain the decision of the International Trade Commission that the doctrine of patent misuse does not bar the intervenor, U.S. Philips Corporation, from enforcing its patent rights against the appellants Princo Corporation and Princo America Corporation (collectively, "Princo").

I

A

This case has a lengthy history, which we will recite only in pertinent part. The technology at issue concerns two types of digital storage devices—recordable compact discs ("CD-Rs") and rewritable compact discs ("CD-RWs"). Those devices were developed in the 1980s and 1990s. The companies that developed the CD-R/RW technology generated technical standards to ensure that discs made by different manufacturers would be compatible and playable on machines that were designed to read the earlier generation compact discs ("CDs") and "read-only" compact discs ("CD-ROMs"). The standards that were generated for CD-Rs and CD-RWs were collected in a publication entitled "Recordable CD Standard," informally known as the "Orange Book." The CD-R/RW technology

was developed principally by Philips and Sony Corporation, working in collaboration. Philips and Sony also jointly developed the Orange Book standards.

One aspect of the CD-R/RW technology—and the corresponding Orange Book standards—is at issue in this case. In the course of their work, the Sony and Philips engineers had to address the problem of how to encode position information in the disc so that a consumer’s CD reader/writer could maintain proper positioning while writing data to the disc. Philips and Sony proposed different solutions to that problem. Philips’s solution was to use an analog method of modulating the frequency of the “groove” on the disc so as to add location codes to the disc. One of Sony’s proposed solutions was to use a digital method to encode location codes into the disc groove. Philips’s approach was later set forth in two of the patents at issue in this case, referred to as the “Raaymakers patents.” Sony’s approach was set forth in one of its own patents, referred to as the “Lagadec patent.”

After reviewing the competing solutions, the Sony and Philips engineers agreed that they would use the Raaymakers approach to solving the problem, not the Lagadec approach. The engineers from both companies agreed that the Raaymakers approach “was simple and . . . worked very well.” By contrast, as the Commission found in the course of this litigation, the Lagadec approach was “prone to error” and would have been “very difficult” to implement. Philips and Sony therefore incorporated the Raaymakers approach in the Orange Book as the standard for manufacturing CD-R/RW discs.

Philips and Sony sought to commercialize their technology by offering licenses to the patents that were required to manufacture CD-R/RW discs in accordance with

the Orange Book standards. Administering the licensing program, Philips offered several different “package” licenses to the Philips and Sony patents (and those of several other patent holders). Philips included in the patent packages those patents that it regarded as potentially necessary to make Orange-Book-compliant CD-R or CD-RW discs, including the Raaymakers and Lagadec patents. The package licenses contained a “field of use” restriction, limiting the licensees to using the licensed patents to produce discs according to the Orange Book standards. After 2001, Philips offered additional package options, grouping the patents into two categories, denominated “essential” and “nonessential,” for producing compact discs that complied with the technology standards set forth in the Orange Book.

In the late 1990s, Princo sought to manufacture discs and import them into this country, and it entered into a package license agreement with Philips. Soon after entering the agreement, however, Princo stopped paying the licensing fees required by the agreement. Philips then filed a complaint with the International Trade Commission, alleging that Princo (along with several other parties) was violating section 337(a)(1)(B) of the Tariff Act of 1930, 19 U.S.C. § 1337(a)(1)(B), by importing CD-Rs and CD-RWs that infringed Philips’s patents.

B

In the course of proceedings before an administrative law judge, Princo raised the affirmative defense of patent misuse. Among other arguments, Princo contended that Philips had improperly forced Princo and other licensees, as a condition of licensing patents that were necessary to manufacture CD-Rs or CD-RWs, to take licenses to other

patents that were not necessary to manufacture those products.

The administrative law judge agreed with Philips that Princo had infringed various claims of the six asserted Philips patents and that the patents were not invalid. However, the administrative law judge denied relief to Philips on the ground that the Philips patents were unenforceable because of patent misuse. The administrative law judge found, *inter alia*, that the package licensing agreements offered by Philips constituted impermissible tying arrangements because they forced manufacturers to license extraneous patents in addition to the patents that the manufacturers wanted to license. That tying arrangement, according to the administrative law judge, rendered all of Philips's patents in suit unenforceable. The administrative law judge also held Philips's patents unenforceable based on price fixing, price discrimination, and restraint of trade.

On Philips's petition for review, the Commission affirmed the administrative law judge's ruling that Philips's package licensing practice constituted patent misuse for unlawfully tying patents that were essential for the Orange Book standard to licenses for other patents that were not essential. That practice was improper, according to the Commission, because it forced licensees to purchase licenses to patents that they did not want or need, and it did not allow them the option of licensing individual patents. The Commission did not address the administrative judge's ruling that the patent pooling arrangements between Philips and its co-licensors, including Sony, constituted price fixing and price discrimination, or the administrative judge's ruling that the royalty structure of the patent pools resulted in an unreasonable restraint of trade.

Philips appealed to this court, and we reversed. *U.S. Philips Corp. v. Int'l Trade Comm'n (Philips I)*, 424 F.3d 1179 (Fed. Cir. 2005). We rejected the Commission's theory that Philips's package licensing practice constituted patent misuse by improperly tying nonessential patents to essential ones. We explained that Philips gave its licensees the option of using any of the patents in the package at the licensee's option, and that Philips charged a uniform fee to permit the manufacture of discs covered by the patented technology regardless of which patents the licensee used in its manufacturing process. Philips did not require the licensee to use any particular technology in any of the patents, including the patents that Princo complained were "nonessential." In effect, we concluded, Philips was simply charging a fixed licensing fee for licensees to manufacture discs under the Orange Book standard. We noted that including additional patents in the package was the functional equivalent of promising not to sue licensees on any of the patents in the group, which had the advantages of minimizing transaction costs and ensuring against the risk of post-agreement disputes as to whether those additional patents were required to practice the patented technology.

We also reversed the Commission's ruling that Philips had engaged in patent misuse under the rule of reason. As to that issue, we held that the Commission's conclusion that Philips's patent package licensing program was anticompetitive was predicated on legal errors and on factual findings that were not supported by substantial evidence. We remanded the case to the Commission for further proceedings because the Commission had not addressed all the grounds on which the administrative law judge had based his ruling.

C

On remand, the Commission rejected Princo's remaining theories of patent misuse. The Commission first rejected Princo's argument that Philips committed patent misuse by combining with its horizontal competitors to fix the price of patent licenses in the relevant market, i.e., the market for licensing CD-R/RW patents. The Commission found that there was no evidence in the record that the patents in the joint package licenses covered technologies that were close substitutes, or that the pool licensors would have competed in the technology licensing market absent the pooling arrangements. Consequently, the Commission found that the joint package licenses had not been shown to constitute horizontal price fixing.

In particular, the Commission rejected Princo's argument that Sony's Lagadec patent should not have been included in the patent packages. The Commission noted Philips's contention that claim 6 of the Lagadec patent covered a portion of the Orange Book standard and therefore was technically a "blocking patent." The Commission explained that if Philips was correct that Lagadec was a necessary part of the Orange Book patent package, then "no misuse flows from including the [Lagadec] patent in the joint licenses." Even if a license to the Lagadec patent was not necessary to manufacture Orange-Book-compliant discs, the Commission stated, there was no merit to Princo's theories of patent misuse based on the Lagadec patent, because "there has been no showing that the Lagadec . . . patent competes with another patent in the pool, no showing that the pool licensors would have competed in the technology licensing market absent the pooling arrangement, and no showing of the anti-competitive effect required under a rule of reason analysis."

After an extensive analysis of the evidence presented to the administrative law judge, the Commission concluded that the record “does not support a finding that the Lagadec ’565 patent competes with the [Raaymakers] patents,” and that Princo “failed to identify evidence demonstrating that, absent the pooling arrangements, the pool licensors would have competed in the technology licensing market.” The Commission noted that the administrative law judge had found that testimony at the hearing indicated that the Lagadec patent “constitutes completely different technology that does not work well according to the Orange Book standards” and that Lagadec was therefore “extraneous to the Orange Book.” In particular, the administrative law judge had found that Lagadec constituted “at best, a substitute technology” that could not be used to manufacture Orange-Book-compliant discs, and “at worst, an extraneous, non-working add-on to the patent pool.” Under those circumstances, the Commission explained, licensees who wished to make Orange-Book-compliant discs were, at most, required to accept something they did not want and would not otherwise have sought to obtain from other sellers.

With respect to the contention that including the Lagadec patent in the license packages enabled Philips to secure Sony’s adherence to the Orange Book standards and thereby foreclose competition, the Commission found that theory speculative and unsupported by the evidence in the record. Because there was no evidence that Sony would have entered the CD-R/RW market with a system based on the Lagadec technology and no evidence that such a system would have become a significant competitive force in that market, the Commission held that theory insufficient to support a finding of patent misuse.

D

On Princo’s appeal, a divided panel of this court ruled against the Commission and Philips. *Princo Corp. v. Int’l Trade Comm’n*, 563 F.3d 1301 (Fed. Cir. 2009). Although the panel rejected several of Princo’s arguments, it vacated the Commission’s remedial orders and remanded the case for further proceedings on one issue.

At the outset, the panel unanimously rejected Princo’s argument that Philips had engaged in patent misuse through improper “tying” by including the Lagadec patent in the Orange Book license packages. The court noted that while grouping patents together in package licenses has anticompetitive potential, it “also has potential to create substantial procompetitive efficiencies” such as clearing possible blocking patents, integrating complementary technology, and avoiding litigation. 563 F.3d at 1308. The court explained that the inclusion in a package license of the patents that are necessary to enable the practice of the particular technology “is not tying of the type that patent misuse doctrine seeks to prevent.” *Id.* Because the court concluded that it would have been reasonable for a manufacturer to believe that a license under the Lagadec patent was necessary to practice the Orange Book technology, and because “one of the major potential efficiencies of package licensing in the context of innovative technology is the avoidance of ‘uncertainty that could only be resolved through expensive litigation,’” the court ruled that the “inclusion of the Lagadec patent in the patent pool did not give rise to an illegal tying arrangement.” *Id.* at 1310-11.

The panel also unanimously rejected Princo’s argument that Philips had violated the principle of *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 135

(1969), that “conditioning the grant of a patent license upon payment of royalties on products which do not use the teaching of the patent [is] misuse.” Because, at the time the package licenses were executed, “it appeared that Lagadec reasonably might be necessary to manufacture Orange Book compact discs,” the panel concluded that “it cannot fairly be said on these facts that a royalty is paid on products which do not use the teaching of the Lagadec patent.” *Princo*, 563 F.3d at 1312-13.

On one issue, however, the panel majority ruled against Philips. The panel noted that *Philips I* did not consider whether Philips and Sony agreed to suppress the Lagadec technology and “whether an agreement that would prevent the development of alternatives [to the licensed technology] would constitute misuse under a theory of elimination of competition or price fixing.” 563 F.3d at 1314. The panel then stated that, in contrast to package licenses, “there are no benefits to be obtained from an agreement between patent holders to forego separate licensing of competing technologies,” and that such agreements are “not within the rights granted to a patent holder” and can constitute an antitrust violation. *Id.* at 1315-16. The panel recognized that “the burden of proving misuse, and the corresponding risk of having made an insufficient record, lies with Princo.” *Id.* at 1321. Nonetheless, the panel directed the Commission to reexamine the record to determine whether “Philips and Sony agreed not to license Lagadec in a way that would allow a competitor ‘to develop, use or license the [Lagadec] technology to create a competing product,’” i.e., a product that would compete with the technology of the Raaymakers patents, *id.* at 1313, and whether, if there was such an agreement, the suppressed technology “could not have been viable,” which would “negate a charge of misuse,” *id.* at 1318-19.

The dissenting judge would have affirmed the Commission. With respect to the suggestion that Sony and Philips had suppressed Lagadec as a platform for manufacturing discs that would compete with Orange-Book-compliant discs, the dissenting judge would have rejected that theory of patent misuse as a factual matter based on the Commission's findings that the Lagadec technology did not work well and would not have competed with the Orange Book technology.

Philips, Princo, and the Commission all filed petitions for rehearing en banc. The court granted the petitions filed by Philips and the Commission, but denied the petition filed by Princo. Although Philips and the Commission have raised a number of issues in their petitions and in their briefs on rehearing en banc, we address only one—Philips's argument that regardless of whether Philips and Sony agreed to suppress the technology embodied in Sony's Lagadec patent, such an agreement would not constitute patent misuse and would not be a defense to Philips's claim of infringement against Princo. For the reasons set forth below, we conclude that the conduct alleged in this case is not the type of conduct that could give rise to the defense of patent misuse and we therefore affirm the Commission's orders granting relief against Princo.¹

II

A

The doctrine of patent misuse has its origins in a series of Supreme Court cases, beginning with the 1917

¹ The en banc court has not addressed Princo's arguments that the panel rejected. Accordingly, those portions of the panel's opinion are reinstated.

decision in *Motion Picture Patents Co. v. Universal Film Manufacturing Corp.*, 243 U.S. 502 (1917). In that case, which involved a patent on a motion picture projector, the Court addressed whether a patentee could require that the projector be used only with certain films, by “prescrib[ing] by notice attached to a patented machine the conditions of its use and the supplies which must be used in the operation of it, under pain of infringement of the patent.” *Id.* at 509. The Court concluded that such a restriction imposed on the purchasers of the patented projectors was invalid because

a film is obviously not any part of the invention of the patent in suit; because it is an attempt, without statutory warrant, to continue the patent monopoly in this particular character of film after it has expired, and because to enforce it would be to create a monopoly in the manufacture and use of moving picture films, wholly outside of the patent in suit and of the patent law as we have interpreted it.

Id. at 518. Since the Court regarded the requirement to use particular films as beyond the legitimate scope of the patent, it held that the patent could not be enforced against a purchaser who used the patented projector with unsanctioned films.

Fourteen years later, in *Carbice Corp. of America v. American Patents Development Corp.*, 283 U.S. 27 (1931), the Court held that it was improper for the owner of a patent on “refrigerating transportation packages” for transporting and storing dry ice to insist that licensees of that patent purchase their dry ice from the patent owner or its affiliates. The Court stated that the patentee “may not exact as the condition of a license that unpatented

materials used in connection with the invention shall be purchased only from the licensor.” 283 U.S. at 31. The seller of dry ice, the Court stated, “has no right to be free from competition in the sale of solid carbon dioxide. Control over the supply of such unpatented material is beyond the scope of the patentee’s monopoly.” *Id.* at 33. Accordingly, the Court ruled that the party that had supplied dry ice to one of the patentee’s licensees could not be held liable for contributory infringement of the patent.

In a third case, *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488 (1942), the patentee owned a patent on a machine used to add salt to canned foods. The patented machines were leased to canners on the condition that the canners would use salt tablets purchased from the patentee. When one of the patentee’s lessees used the machine with its own salt tablets, the patentee sued for infringement. The Supreme Court held that the patent was unenforceable on the ground that the patentee had unlawfully used the patent “to secure an exclusive right or limited monopoly not granted by the Patent Office and which it is contrary to public policy to grant.” *Id.* at 492.

In those cases, and several others in the same line of authority, the Supreme Court established the basic rule of patent misuse: that the patentee may exploit his patent but may not “use it to acquire a monopoly not embraced in the patent.” *Transparent-Wrap Mach. Corp. v. Stokes & Smith Co.*, 329 U.S. 637, 643 (1947). As for the most common form of patent misuse—requiring the purchase of an unpatented product as a condition for obtaining a license to the patent, the Court observed, “He who uses his patent to obtain protection from competition in the sale of unpatented materials extends by contract his patent monopoly to articles as respects which the law

sanctions neither monopolies nor restraints of trade.” *Id.* at 644.

The Court applied the same reasoning to licenses requiring the payment of licensing fees after the expiration of the licensed patent and thus having the effect of extending the life of the patent beyond the statutory period. In *Brulotte v. Thys Co.*, 379 U.S. 29 (1964), the Court explained that a patent “empowers the owner to exact royalties as high as he can negotiate with the leverage of that monopoly. But to use that leverage to project those royalty payments beyond the life of the patent is analogous to an effort to enlarge the monopoly of the patent by tying the sale or use of the patented article to the purchase or use of unpatented ones.” *Id.* at 33.

As applied to patent licensing agreements, the Supreme Court put the matter succinctly in *Zenith*, 395 U.S. at 136:

[T]here are established limits which the patentee must not exceed in employing the leverage of his patent to control or limit the operations of the licensee. Among other restrictions upon him, he may not condition the right to use his patent on the licensee’s agreement to purchase, use, or sell, or not to purchase, use, or sell, another article of commerce not within the scope of his patent monopoly.

In our cases applying the Supreme Court’s patent misuse decisions, we have characterized patent misuse as the patentee’s act of “impermissibly broaden[ing] the ‘physical or temporal scope’ of the patent grant with anticompetitive effect.” *Windsurfing Int’l, Inc. v. AMF, Inc.*, 782 F.2d 995, 1001 (Fed. Cir. 1986). When the

patentee has used restrictive conditions on licenses or sales to broaden the scope of the patent grant, we have held that an accused infringer may invoke the doctrine of patent misuse to defeat the patentee's claim. See *Mon-santo Co. v. McFarling*, 363 F.3d 1336, 1341 (Fed. Cir. 2004); *Va. Panel Corp. v. MAC Panel Co.*, 133 F.3d 860, 870 (Fed. Cir. 1997); *Senza-Gel Corp. v. Seiffhart*, 803 F.2d 661 (Fed. Cir. 1986).

In *B. Braun Medical, Inc. v. Abbott Laboratories*, 124 F.3d 1419 (Fed. Cir. 1997), and *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700 (Fed. Cir. 1992), we explained the rationale underlying the doctrine. As a general matter, the unconditional sale of a patented device exhausts the patentee's right to control the purchaser's use of the device thereafter, on the theory that the patentee has bargained for, and received, the full value of the goods. That "exhaustion" doctrine does not apply, however, to a conditional sale or license, where it is more reasonable to infer that a negotiated price reflects only the value of the "use" rights conferred by the patentee. Thus, express conditions accompanying the sale or license of a patented product, such as field of use limitations, are generally upheld. See *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, 181 (1938) ("Patent owners may grant licenses extending to all uses or limited to use in a defined field."). When those contractual conditions violate public policy, however, as in the case of price-fixing conditions and tying restraints, the underlying patents become unenforceable, and the patentee loses its right to sue for infringement or breach of contract. *B. Braun*, 124 F.3d at 1426; *Mallinckrodt*, 976 F.2d at 706.

The doctrine of patent misuse is thus grounded in the policy-based desire to "prevent a patentee from using the patent to obtain market benefit beyond that which in-

heres in the statutory patent right.” *Mallinckrodt*, 976 F.2d at 704. It follows that the key inquiry under the patent misuse doctrine is whether, by imposing the condition in question, the patentee has impermissibly broadened the physical or temporal scope of the patent grant and has done so in a manner that has anticompetitive effects. *B. Braun*, 124 F.3d at 1426. Where the patentee has not leveraged its patent beyond the scope of rights granted by the Patent Act, misuse has not been found. *See Monsanto*, 363 F.3d at 1341 (“In the cases in which the restriction is reasonably within the patent grant, the patent misuse defense can never succeed.”); *Virginia Panel*, 133 F.3d at 869 (particular practices by the patentee “did not constitute patent misuse because they did not broaden the scope of its patent, either in terms of covered subject matter or temporally”).

In determining whether a particular licensing condition has the effect of impermissibly broadening the patent grant, courts have noted that the patentee begins with substantial rights under the patent grant—“includ[ing] the right to suppress the invention while continuing to prevent all others from using it, to license others, or to refuse to license, . . . to charge such royalty as the leverage of the patent monopoly permits,” and to limit the scope of the license to a particular “field of use.” *United States v. Studiengesellschaft Kohle, m.b.H.*, 670 F.2d 1122, 1127, 1133 (D.C. Cir. 1981). Given that the patent grant entitles the patentee to impose a broad range of conditions in licensing the right to practice the patent, the doctrine of patent misuse “has largely been confined to a handful of specific practices by which the patentee seemed to be trying to ‘extend’ his patent grant beyond its statutory limits.” *USM Corp. v. SPS Techs., Inc.*, 694 F.2d 505, 510 (7th Cir. 1982).

Recognizing the narrow scope of the doctrine, we have emphasized that the defense of patent misuse is not available to a presumptive infringer simply because a patentee engages in some kind of wrongful commercial conduct, even conduct that may have anticompetitive effects. *See C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1373 (Fed. Cir. 1998) (“Although the defense of patent misuse . . . evolved to protect against ‘wrongful’ use of patents, the catalog of practices labelled ‘patent misuse’ does not include a general notion of ‘wrongful’ use.”). Other courts have expressed the same view. *See Kolene Corp. v. Motor City Metal Treating, Inc.*, 440 F.2d 77, 84-85 (6th Cir. 1971) (There is no such thing as “misuse in the air. The misuse must be of the patent in suit. An antitrust offense does not necessarily amount to misuse merely because it involves patented products or products which are the subject of a patented process.” (citations omitted)); *McCullough Tool Co. v. Well Surveys, Inc.*, 395 F.2d 230, 238-39 (10th Cir. 1968) (the defense of patent misuse has been allowed “only where there had been a misuse of the patent in suit”). While proof of an antitrust violation shows that the patentee has committed wrongful conduct having anticompetitive effects, that does not establish misuse of the patent in suit unless the conduct in question restricts the use of that patent and does so in one of the specific ways that have been held to be outside the otherwise broad scope of the patent grant.²

² Some courts and commentators have questioned the continuing need for the doctrine of patent misuse, which had its origins before the development of modern antitrust doctrine. *See USM Corp.*, 694 F.2d at 511 (“Since the antitrust laws as currently interpreted reach every practice that could impair competition substantially, it is not easy to define a separate role for a doctrine also designed to prevent an anticompetitive practice—the

Although patent misuse has been mainly a judicially created defense, Congress has not been entirely silent about the doctrine. However, instead of saying what patent misuse is, Congress has said what it is not. Thus, section 271(d) of the Patent Act sets forth five types of conduct that may not provide the basis for finding “misuse or illegal extension of the patent right.” The last two of the five, which were added in 1988, are

(4) refus[ing] to license or use any rights to the patent; or (5) condition[ing] the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent owner has market power in the relevant market for the patent or patented product on which the license or sale is conditioned.

35 U.S.C. § 271(d).

Importantly, Congress enacted section 271(d) not to broaden the doctrine of patent misuse, but to cabin it. *See Dawson Chem. Co. v. Rohm & Haas Co.*, 448 U.S. 176, 201 (1980) (addressing the role of section 271(d) in narrowing the scope of patent misuse). The 1988 amendment in particular was designed to confine patent misuse, with respect to certain licensing practices, to conduct having anticompetitive effects. *See Ill. Tool Works Inc. v. Indep.*

abuse of a patent monopoly.”); Mark A. Lemley, *The Economic Irrationality of the Patent Misuse Doctrine*, 78 Cal. L. Rev. 1599, 1614-20 (1990). The Supreme Court’s patent misuse cases have not been overruled, however, and we therefore apply the principles of patent misuse as that Court’s decisions and our own prior precedents direct. *Senza-Gel*, 803 F.2d at 665 n.5.

Ink, Inc., 547 U.S. 28, 41 (2006); S. Rep. No. 100-492, at 9 (1988) (explaining that purpose of the amendment was to narrow the patent misuse doctrine, which “punish[es] innovators engaged in procompetitive distribution and licensing practices”); *id.* at 14 (“The lack of clarity and predictability in application of the patent misuse doctrine and that doctrine’s potential for impeding procompetitive arrangements are major causes for concern.”); 134 Cong. Rec. 32,471 (1988) (statement of Sen. Patrick Leahy) (“Reform of patent misuse will ensure that the harsh misuse sanction of unenforceability is imposed only against those engaging in truly anticompetitive conduct.”); *id.* at 32,295 (statement of Rep. Robert Kasteneier) (“[T]he proposed modifications should have a procompetitive effect, insofar as they require some linkage between patent licensing practice and anti-competitive conduct.”).³

The dissent argues that the 1988 amendment to section 271(d) makes it “quite clear that Congress intended that the patent misuse doctrine could extend to a refusal to license patented technologies by parties acting in concert.” That, however, is not how we interpret the statute or its legislative history. The statute itself con-

³ The dissent refers on several occasions to the Supreme Court’s statement in *Independent Ink* that it “would be absurd to assume that Congress intended to provide that the use of a patent that merited punishment as a felony would not constitute ‘misuse.’” 547 U.S. at 42. In that statement, however, the Court was simply making the point that Congress’s decision to require proof of market power to establish patent misuse was powerful evidence that Congress intended proof of market power to be similarly required to establish a criminal antitrust violation for the same conduct. The Court was not suggesting that every antitrust violation committed by a patentee constitutes patent misuse.

tains no mention of concerted action. In the legislative history, Representative Kastenmeier described various licensing provisions that had been held to constitute patent misuse, including price fixing, covenants not to compete, resale price maintenance, and grantback licenses. 134 Cong. Rec. 32,295 (1988). The dissent points to the inclusion of “covenants not to compete” in Representative Kastenmeier’s list, and interprets that statement as an endorsement of the proposition that a concerted refusal to license a patent constitutes patent misuse. But Representative Kastenmeier described the listed practices as “patent licensing arrangements.” *Id.* Moreover, his catalog of unlawful practices corresponded to the list of proscribed practices set forth in the House bill, the “Patent Licensing Reform Act of 1988,” to which he alluded in his remarks. *Id.* at 32,294. Each of the prohibited practices listed in that bill was a condition on granting licenses, including the imposition of “covenants not to compete.” 134 Cong. Rec. 3261 (1988) (statement of Rep. Robert Kastenmeier); H.R. 4086, 100th Cong. (1988) (“unreasonably imposing as a condition of granting a license for a patent that the licensee may not produce or sell competing goods.”). From the context, it is clear that Representative Kastenmeier’s reference to “covenants not to compete” on which the dissent relies was an allusion to non-compete clauses in patent licenses, not to concerted refusals to license among horizontal competitors. Nor is there anything else in the legislative history that supports the dissent’s interpretation of Congress’s intent.

Section 271(d) is not directly implicated in this case because the conduct here at issue does not fall within any of the five statutorily defined categories. Nonetheless, the statute is pertinent because, as both the text and the legislative history of the 1988 amendment to section 271(d) make clear, Congress was concerned about the

open-ended scope of the doctrine and sought to confine it to anticompetitive conduct by patentees who leverage their patents to obtain economic advantages outside the legitimate scope of the patent grant.

B

This case presents a completely different scenario from the cases previously identified by the Supreme Court and by this court as implicating the doctrine of patent misuse. Philips is not imposing restrictive conditions on the use of the Raaymakers patents to enlarge the physical or temporal scope of those patents. Instead, the alleged act of patent misuse that the panel focused on was the claimed horizontal agreement between Philips and Sony to restrict the availability of the Lagadec patent—an entirely different patent that was never asserted in the infringement action against Princo. Even if such an agreement were shown to exist, and even if it were shown to have anticompetitive effects, a horizontal agreement restricting the availability of Sony’s Lagadec patent would not constitute misuse of Philips’s Raaymakers patents or any of Philips’s other patents in suit.

Reduced to its simplest elements, the question in this case comes down to this: When a patentee offers to license a patent, does the patentee misuse that patent by inducing a third party not to license its separate, competitive technology? Princo has not pointed to any authority suggesting that such a scenario constitutes patent misuse, and nothing in the policy underlying the judge-made doctrine of patent misuse would support such a result.⁴

⁴ Princo relies on a single case with unusual facts, *Compton v. Metal Products, Inc.*, 453 F.2d 38 (4th Cir. 1971), as support for its expansive patent misuse theory. In that case, the patentee agreed, as part of a patent

Such an agreement would not have the effect of increasing the physical or temporal scope of the patent in suit, and it therefore would not fall within the rationale of the patent misuse doctrine as explicated by the Supreme Court and this court.

What patent misuse is about, in short, is “patent leverage,” i.e., the use of the patent power to impose overbroad conditions on the use of the patent in suit that are “not within the reach of the monopoly granted by the Government.” *Zenith*, 395 U.S. at 136-38. What that requires, at minimum, is that the patent in suit must “itself significantly contribute[] to the practice under attack.” *Kolene Corp.*, 440 F.2d at 85. Patent misuse will not be found when there is “no connection” between the patent right and the misconduct in question, *see Republic Molding Corp. v. B.W. Photo Utils.*, 319 F.2d 347, 351 (9th Cir. 1963), or no “use” of the patent, *see Virginia Panel*, 133 F.3d at 870. In this case, there is no such link between the putative misconduct and the Raaymakers patents.

Princo makes several arguments in its effort to bring this case within the scope of the traditional patent misuse

licensing agreement, not to compete with the licensee for a period of 20 years. The court held that the non-compete agreement violated “the common law prohibition against agreements in restraint of trade as well as Section 1 of the Sherman Act,” and it further held that the agreement constituted patent misuse that rendered the underlying patents unenforceable against any third-party infringers. *Id.* at 44. That case is distinguishable on its facts, but to the extent the court in that case held the patents unenforceable based on the patentee’s agreement to limit his own freedom of action, we find the court’s conclusion that there was patent misuse to be unsupported by precedent or reasoning.

doctrine. First, Princo contends that Philips “leveraged” its patents, as that term has been used in patent misuse cases, because it used the proceeds of its highly successful licensing program to fund royalty payments to Sony and because those payments gave Sony the incentive to enter into the alleged agreement to suppress the Lagadec patent. However, the use of funds from a lawful licensing program to support other, anticompetitive behavior is not the kind of “leveraging” that the Supreme Court and this court have referred to in discussing the leveraging of a patent that constitutes patent misuse. *See C.R. Bard*, 157 F.3d at 1373 (“Although the law should not condone wrongful commercial activity, the body of misuse law and precedent need not be enlarged into an open-ended pitfall for patent-supported commerce.”). Even if such use of funds were to be deemed misconduct, it does not place any conditions on the availability of Philips’s patents to any potential licensees, so it is not the power of Philips’s patent right that is being misused.

Princo also argues that the Supreme Court has not required conventional “leveraging” of a patent in order to establish patent misuse. For that proposition, however, Princo relies on antitrust cases in which the Court stated that a patentee is not immunized against an antitrust violation by the privilege of a patent; those cases did not involve patent misuse or the enforceability of the defendants’ patents. *See United States v. U.S. Gypsum Co.*, 333 U.S. 364, 396-400 (1948) (finding unlawful price fixing and control of distribution of gypsum board); *Standard Oil Co. (Ind.) v. United States*, 283 U.S. 163, 174 (1931) (“[T]he limited monopolies granted to patent owners do not exempt them from the prohibitions of the Sherman Act.”). That is a different issue altogether from the issue before us, which is whether an infringing party can obtain immunity against a valid charge of patent infringement

by showing an unrelated antitrust violation. Although the Lagadec patent and the Raaymakers patents were all included together in the Orange Book package licenses offered by Philips, those package licenses are independent of the antitrust violation that is now being alleged, i.e., a separate agreement between Philips and Sony to suppress the availability of the Lagadec technology.

In theory, the reason an agreement with Sony has value to Philips is because suppressing potential competition with the Raaymakers technology makes the Philips licenses more valuable. But that value does not derive from the fact that Sony is a co-licensor with Philips or the fact that the Lagadec patent is included in the package licenses. If the Lagadec patent were owned by an independent third party and not included in the Philips-Sony package licenses at all, an agreement between Philips and the third party to suppress the Lagadec technology would have exactly the same economic impact on Philips and Princo as the hypothesized agreement with Sony. That agreement might be vulnerable to challenge under the antitrust laws, but it could not reasonably be characterized as misuse of the Raaymakers patents. Thus, it does not follow from the possible existence of an antitrust violation with respect to Sony's Lagadec patent that Philips is guilty of patent misuse with respect to the Raaymakers patents.

The dissent does not find fault with the terms of the licensing agreements between Philips and its licensees, but instead focuses its full attention on the purported horizontal agreement between Philips and Sony to suppress the Lagadec technology. The dissent then characterizes that agreement as invoking the doctrine of patent misuse because it is "part and parcel" of the licensing agreements between Philips and its licensees. That

characterization, however, is incorrect. The Orange Book licensing agreements control what the licensees may do; the purported agreement between Philips and Sony controls what Sony may do. At bottom, Princo's complaint is not that its license to the Raaymakers patents is unreasonably conditioned, but that the Lagadec patent has not been made available for non-Orange-Book uses. And that is not patent misuse under any court's definition of the term.

The purported agreement between Philips and Sony has none of the features that courts have characterized as constituting patent misuse. In particular, it does not leverage the power of a patent to exact concessions from a licensee that are not fairly within the ambit of the patent right. Although the dissent contends that using the leverage of a patent against licensees is not a necessary component of patent misuse, every one of the "patent misuse" cases cited by the dissent for that proposition have that very fact pattern (except for the *Compton* case, discussed above, in which the patentee agreed to place restrictions on his own right to compete). If the purported agreement between Philips and Sony not to license the Lagadec technology is unlawful, that can only be under antitrust law, not patent misuse law; nothing about that agreement, if it exists, constitutes an exploitation of the Raaymakers patents against Philips's licensees.⁵

⁵ The dissent suggests in passing that the Sony-Philips agreement also constitutes misuse of the Lagadec patent. How a patent that is not enforced can be misused is not explained, nor is it clear why misuse of the Lagadec patent should be a defense against infringement of different patents. The dissent cites language from a Second Circuit case, *SCM Corp. v. Xerox Corp.*, 645 F.2d 1195, 1204 (2d Cir. 1981), which stated that "a concerted refusal to license patents" is unlawful and that "in such cases the

The *Morton Salt* case, which the dissent cites in support of its broad characterization of the doctrine of patent misuse, is a typical “tying” case in which the patentee leveraged its patent to a machine by insisting that its licensees purchase unpatented goods, to be used in connection with the machine, from the patentee. It was because of the unlawful condition on the patent license that the Court in *Morton Salt* declined to enforce the patent. Significantly, the Court explained that its ruling was based on the use of the patent “as a means of restraining competition with the patentee’s sale of an unpatented product,” and that the successful prosecution of an infringement action “is a powerful aid to the maintenance of the attempted monopoly of the unpatented product,” thus “thwarting the public policy underlying the grant of the patent.” 314 U.S. at 493. There is no such exploitation of the Raaymakers patents in this case.⁶

patent holder abuses his patent by attempting to enlarge his monopoly beyond the scope of the patent granted him.” The court’s point was that such conduct could violate the antitrust laws; as such, we interpret the court’s reference to “abus[ing] his patent” simply as a shorthand way of making that point, and not as a statement about the law of patent misuse.

⁶ The dissenters argue that antitrust law is not adequate to protect victims of anticompetitive conduct by patentees and that the doctrine of patent misuse must be interpreted expansively to fill that gap. Antitrust law, however, provides robust remedies including both public and private enforcement. An accused infringer can raise a Sherman Act claim as a counterclaim in an infringement action or as an affirmative claim, and is eligible for treble damages and attorney’s fees. As to the doctrinal limitations that apply to antitrust plaintiffs generally, such as the standing requirement, there is no reason to believe those limitations are inappropriate simply because a party is seeking relief against a patentee.

In sum, this is not a case in which conditions have been placed in patent licenses to require licensees to agree to anticompetitive terms going beyond the scope of the patent grant. Rather, in this case the assertion of misuse arises not from the terms of the license itself but rather from an alleged collateral agreement between Sony and Philips. In that setting, the doctrine of patent misuse does not immunize Princo against the legal effect of its acts of infringement.

C

Apart from Princo's failure to show that Philips unlawfully leveraged its Raaymakers patents, a finding of patent misuse is unwarranted in this case because Princo failed to establish that the alleged agreement to suppress the Lagadec technology had anticompetitive effects. Whether viewed as a matter of patent misuse or in light of general antitrust principles, Princo's claim regarding the alleged agreement fails because Philips and Sony acted legitimately in choosing not to compete against their own joint venture. Princo also failed to show that the asserted agreement had any anticompetitive effects because, as the Commission found, the Lagadec technology was not a viable potential competitor to the technology embodied in the Raaymakers patents.

At the outset, Princo urges us to overrule the line of authority in this court holding that patent misuse requires a showing that the patentee's conduct had anticompetitive effects. We decline to do so. This court has observed that "[t]o sustain a misuse defense involving a licensing arrangement not held to have been per se anticompetitive by the Supreme Court, a factual determination must reveal that the overall effect of the license tends to restrain competition unlawfully in an appropriately

defined relevant market.” *Windsurfing*, 782 F.2d at 1001-02. We have consistently adhered to that requirement. *See, e.g., Philips I*, 424 F.3d at 1184; *Monsanto*, 363 F.3d at 1341; *Virginia Panel*, 133 F.3d at 868; *B. Braun*, 124 F.3d at 1426; *Mallinckrodt*, 976 F.2d at 708. Our position is consistent with the traditional characterization of the defense of patent misuse by the Supreme Court, *see Ill. Tool Works*, 547 U.S. at 38 (describing the patent misuse doctrine as applying “when a patentee uses its patent ‘as the effective means of restraining competition with its sale of an unpatented article’” (citation omitted); the decisions of other circuits, *see County Materials Corp. v. Allan Block Corp.*, 502 F.3d 730, 736 (7th Cir. 2007); *Carpet Seaming Tape Licensing Corp. v. Best Seam Inc.*, 616 F.2d 1133, 1142 (9th Cir. 1980); and the 1988 amendment to 35 U.S.C. § 271(d), which makes clear that Congress intended to limit patent misuse to practices having anticompetitive effects.

Turning from patent misuse law to antitrust principles, Princo contends that the hypothesized agreement between Philips and Sony not to license the Lagadec technology for non-Orange-Book purposes was a naked restraint of trade with no procompetitive justification, and that Philips’s conduct in entering into that agreement should render its Orange Book patents unenforceable. For the reasons set forth below, we disagree.

Although joint ventures can be used to facilitate collusion among competitors and are therefore subject to antitrust scrutiny, *see NCAA v. Bd. of Regents of the Univ. of Okla.*, 468 U.S. 85, 113 (1984), research joint ventures such as the one between Philips and Sony can have significant procompetitive features, and it is now well settled that an agreement among joint venturers to pool their research efforts is analyzed under the rule of reason. *See*

Addamax Corp. v. Open Software Found., Inc., 152 F.3d 48, 52 (1st Cir. 1998) (Joint venture research enterprises, “unless they amount to complete shams, are rarely susceptible to per se treatment. Where the venture is producing a new product . . . there is patently a potential for a productive contribution to the economy, and conduct that is strictly ancillary to this productive effort . . . is evaluated under the rule of reason.”); *see generally Am. Needle, Inc. v. Nat’l Football League*, 130 S. Ct. 2201, 2007 (2010) (rule of reason generally applied to joint venture agreements); *Texaco Inc. v. Dagher*, 547 U.S. 1, 5-6 (2006); *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 23 (1979); *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 768 (1984); 15 U.S.C. § 4302 (conduct of research joint ventures is “not deemed illegal per se,” but is “judged on the basis of its reasonableness, taking into account all relevant factors affecting competition”); FTC & Dep’t of Justice, *Antitrust Guidelines for Collaborations Among Competitors* § 3.31(a), at 14 (2000) (most research joint venture agreements “are procompetitive, and they typically are analyzed under the rule of reason”); ABA, *Antitrust Law Developments* 445-46 (6th ed. 2007) (“joint research ventures are typically analyzed under the rule of reason”).

Collaboration for the purpose of developing and commercializing new technology can result in economies of scale and integrations of complementary capacities that reduce costs, facilitate innovation, eliminate duplication of effort and assets, and share risks that no individual member would be willing to undertake alone, thereby “promot[ing] rather than hinder[ing] competition.” Dep’t of Justice & FTC, *Antitrust Guidelines for the Licensing of Intellectual Property* §§ 5.1, at 24; 5.5, at 28 (Apr. 6, 1995); *see also* Herbert Hovenkamp, *Antitrust Law* ¶ 2115a, at 110 (“[J]oint innovation often produces significant social

benefits in relation to costs.”); FTC & Dep’t of Justice, *Antitrust Guidelines for Collaborations Among Competitors* § 2.1, at 6 (Apr. 2000); Thomas A. Piraino, Jr., *The Antitrust Analysis of Joint Ventures After the Supreme Court’s Dagher Decision*, 57 *Emory L.J.* 735, 767-68 (2008); Joseph Kattan, *Antitrust Analysis of Technology Joint Ventures: Allocative Efficiency and the Rewards of Innovation*, 61 *Antitrust L.J.* 937, 938 (1993).

In particular, as we explained in *Philips I*, research joint ventures that seek to develop industry-wide standards for new technology can have decidedly procompetitive effects. The absence of standards for new technology can easily result in a “Tower of Babel” effect that increases costs, reduces utility, and frustrates consumers. As a leading treatise has noted, cooperation by competitors in standard-setting “can provide procompetitive benefits the market would not otherwise provide, by allowing a number of different firms to produce and market competing products compatible with a single standard.” Herbert Hovenkamp et al., *IP & Antitrust* § 35.2b (2010). Those benefits include greater product interoperability, including the promotion of price competition among interoperable products; positive network effects, including an increase in the value of products as interoperable products become more widely used; and incentives to innovate by establishing a technical baseline for further product improvements. *See* Patrick D. Curran, Comment, *Standard-Setting Organizations: Patents, Price Fixing, and Per Se Legality*, 70 *U. Chi. L. Rev.* 983, 985-90 (2003). Congress has recognized those procompetitive features and has directed that the activities of a “standards development organization while engaged in a standards development activity” is subject to the rule of reason. *See* Standards Development Organization Ad-

vancement Act of 2004, Pub. L. No. 108-237 § 104, 118 Stat. 661, 663.

The “ancillary restraints” that are often important to collaborative ventures, such as agreements between the collaborators not to compete against their joint venture, are also assessed under the rule of reason. *See Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 214, 223-30 (D.C. Cir. 1986) (unlike a naked horizontal restraint that does not accompany a contract integration, “an ancillary horizontal restraint, one that is part of an integration of the economic activities of the parties and appears capable of enhancing the group’s efficiency, is to be judged according to its purpose and effect”); *Polk Bros., Inc. v. Forest City Enters., Inc.*, 776 F.2d 185, 189 (7th Cir. 1985) (“A restraint is ancillary when it may contribute to the success of a cooperative venture that promises greater productivity and output.”); *Engine Specialties, Inc. v. Bombardier Ltd.*, 605 F.2d 1, 11 (1st Cir. 1979) (agreement that “neither of the parties to the joint venture will compete with it” is “not offensive in and of itself”); *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 280 (6th Cir. 1898), *aff’d*, 175 U.S. 211 (1899) (“Restrictions in the articles of partnership upon the business activity of the members, with a view of securing their entire effort in the common enterprise were, of course, only ancillary to the main end of the union, and were to be encouraged.”); Hovenkamp, *Antitrust Law* ¶ 2115b1, at 113 (agreements between firms engaged in joint innovation not to innovate in the same area outside the context of the joint venture “are to be regarded as ancillary rather than naked restraints and are thus subject to the usual proof of power and anticompetitive effects”). Moreover, those ancillary restraints are not viewed in isolation, but in the context of the joint venture or other collaborative effort. Thus, agreements not to compete that might be suspect stand-

ing alone are regarded as reasonable when they are ancillary to “a larger endeavor whose success they promote.” *Polk Bros.*, 776 F.2d at 189.⁷

Princo does not contend that the selection of the Raaymakers technology, rather than the Lagadec technology, for the Orange Book standard was a violation of the public policy in favor of free competition, nor did the panel so find. Instead, the panel focused on whether Sony and Philips agreed to suppress competition between the technology represented by the Orange Book standard and technology that fell outside the Orange Book standard, i.e., the Lagadec digital encoding technology. The Commission did not answer that question because the question was never squarely presented to it. Nor do we need to decide whether there was any such agreement between Sony and Philips. That is because the Commission’s factual findings make it clear that even if there was such

⁷ Princo argues that the alleged agreement between Philips and Sony was not “ancillary” to a collaborative joint venture, based on its factual contention that the Lagadec technology “was not the product of a joint venture, but rather was independently developed by Sony.” The panel opinion, however, rejected that argument, noting that “[t]he Lagadec and Raaymakers patents stem from the joint efforts of Philips and Sony engineers to develop recordable CDs in the late 1980s. . . . Philips and Sony ultimately chose to define the Orange Book standard using the analog Raaymakers . . . approach, not the digital Lagadec method.” *Princo*, 563 F.3d at 1305-06. The panel’s opinion was supported by the administrative law judge’s findings, and by evidence that Sony advanced the proposal that ultimately was incorporated into the Lagadec patent as part of an extended course of collaboration with Philips during the 1980s. *See* Hearing Tr. 372-409 (June 10, 2003). Nothing in Princo’s en banc presentation persuades us that the panel’s description of the development of the Lagadec technology was incorrect.

an agreement, it did not have the effect of suppressing potentially viable technology that could have competed with the Orange Book standards.

The Commission found that “there has been no showing that the Lagadec ’565 patent competes with another patent in the pool, no showing that the pool licensors would have competed in the technology licensing market absent the pooling arrangement, and no showing of the anti-competitive effect required under a rule of reason analysis.” The Commission supported that general finding with a series of specific findings based on the record before it.

First, the Commission noted that the evidence before the administrative law judge showed that the Lagadec technology “does not work well according to the Orange Book standards.” The Commission added that the administrative law judge “credited testimony that the Lagadec approach is prone to errors and ‘did not provide a scheme that would work and was reliable.’” Those findings were not limited to the unsuitability of using Lagadec to produce Orange-Book-compliant discs, as Princo argues. Instead, as is clear from the testimony on which those findings were based, the findings applied more generally to the technical problems presented by the Lagadec technology. The administrative law judge referred to testimony by Philips’s expert explaining that there is “a real problem” with the Lagadec digital approach and that “it is very difficult to carry out a decoding of this particular approach.” The expert added that “[a]s a result, Philips and Sony dismissed the Lagadec approach because this is a very difficult problem to solve and Lagadec just did not provide a scheme that would work and was reliable. . . . [F]rom basic physics, you can just see that

this is not a good solution, and it really wouldn't work well."

The Commission also noted that Princo had not pointed to any evidence "that the Lagadec approach is a commercially viable technological alternative to the technology of [the Raaymakers patents]." By way of explanation, the Commission commented that "the commercial viability of a method that is prone to errors, unreliable, and unworkable is doubtful." Based on the Commission's use of the term "commercial viability," Princo argues that the Commission used the wrong standard in evaluating the Lagadec technology. According to Princo, instead of addressing the commercial viability of that technology, the Commission should have limited its inquiry to whether Lagadec had "the technical potential to develop as a workable alternative." The Commission, however, addressed both technical feasibility and commercial potential, and it found the Lagadec approach lacking in both respects.

Second, the Commission rejected the argument that Philips "included Sony in the [patent] pool not because Sony brought anything necessary to the CD-R/RW technology, but rather because Sony is a major player in the industry, whose cooperation Philips wanted." The Commission found that assertion to be baseless and contrary to the testimony of several witnesses that Philips "partnered with Sony for technical reasons." Thus, although Princo argues at length that the pooling arrangement was not designed as a joint technical project between Philips and Sony, but rather as a means of allowing Philips to share its royalties with Sony in exchange for Sony's agreement not to compete against the Orange Book standard, the Commission found to the contrary.

Finally, with respect to Princo's related argument that including the Lagadec patent in the package licenses enabled Philips to avoid competition from non-Orange-book discs, the Commission stated that Princo had "not identified evidence establishing that, if Sony's [Lagadec patent] were not included in the licenses, Sony likely would have developed technologies that competed against the Orange Book standard in a relevant market." The Commission added that there was no evidence in the record that Sony "would have entered and survived to become a significant competitive force" in the CD-R/RW market with the Lagadec technology or that, absent the pooling arrangements, the pool licensors would have competed with the Orange Book technology.

Likewise, there was no evidence that any potential licensee might develop the Lagadec technology to compete with the Orange Book discs. Princo did not show that any potential disc manufacturer had ever been refused a license to the Lagadec patent for purposes of producing non-Orange-Book discs, or had even sought to explore that possibility. Nor has Princo pointed to any evidence that the Lagadec patent was anything more than a theoretical solution, or that the unavailability of a separate license to Lagadec for non-Orange-Book purposes resulted in some realistic foreclosure of competition.

While the suppression of nascent threats can be construed as anticompetitive behavior under certain circumstances, see *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (en banc), Princo had the burden of showing that the hypothesized agreement had an actual adverse effect on competition in the relevant market. See *Cal. Dental Ass'n v. FTC*, 526 U.S. 756, 775 n.12 (1999); *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323, 1332 (Fed. Cir. 2008) (noting that an antitrust

plaintiff bears the initial burden of showing an actual adverse effect on competition); *see also Clorox Co. v. Sterling Winthrop, Inc.*, 117 F.3d 50, 60 (2d Cir. 1997) (antitrust plaintiff required to produce evidence that the challenged agreement could “significantly affect competition”); *U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589, 596 (1st Cir. 1993) (no rule of reason violation “[a]bsent a compelling showing of foreclosure [of competition] of substantial dimensions”); *Bhan v. NME Hosps., Inc.*, 929 F.2d 1404, 1413 (9th Cir. 1991) (antitrust plaintiff must show restraint is likely “to impair competition significantly”); *DeLong Equip. Co. v. Wash. Mills Abrasive Co.*, 887 F.2d 1499, 1507 (11th Cir. 1989) (antitrust plaintiff in rule of reason case bears the burden of showing that the challenged agreement had a “significant anticompetitive effect”); Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 1507c (antitrust plaintiff must introduce evidence that defendants “have restrained trade significantly” and have “impair[ed] competition” in a relevant market).

What Princo had to demonstrate was that there was a “reasonable probability” that the Lagadec technology, if available for licensing, would have matured into a competitive force in the storage technology market. *See United States v. Penn-Olin Chem. Co.*, 378 U.S. 158, 175-76 (1964) (requiring a finding that there was a reasonable probability that the competing companies would have “entered the market” or “remained a significant potential competitor”). It was not enough that there was some speculative possibility that Lagadec could have overcome the barriers to its technical feasibility and commercial success and become the basis for competing disc technology. The Commission found that Princo failed to show that the Lagadec technology had technical or commercial prospects that could enable it to compete with the Orange

Book technology. Those findings wholly undermine Princo's contention that this is a case in which the patents in suit have been used as part of an overall horizontal agreement with the effect of keeping a viable competitor out of the relevant market.

The dissenting opinion seeks to sidestep the Commission's adverse factual findings by arguing that the burden of proof should have been placed on Philips, not Princo. The dissent acknowledges that an agreement among joint venturers who would otherwise be competitors is judged by the rule of reason. Within that framework, however, the dissent advocates a "quick look" rule of reason analysis on the ground that any agreement not to compete is inherently suspect and that competitive harm therefore should be presumed.

Quick-look analysis applies to "naked restraint[s] on price and output" where a detailed market analysis is unnecessary to conclude that the arrangements in question have anticompetitive effects. *Cal. Dental*, 526 U.S. at 769-70. In those circumstances, only a quick look is necessary because the arrangement is "so plainly anticompetitive that courts need undertake only a cursory examination before imposing antitrust liability." *Dagher*, 547 U.S. at 7 n.3; *see also Cal. Dental*, 526 U.S. at 781 ("The object is to see whether the experience of the market has been so clear, or necessarily will be, that a confident conclusion . . . will follow from a quick (or at least quicker) look, in place of a more sedulous one."). However, the Supreme Court has cautioned that presumptions of anticompetitiveness should not be lightly invoked. *Broad. Music*, 441 U.S. at 8-9. Rather, the Court has stated:

[B]efore a theoretical claim of anticompetitive effects can justify shifting to a defendant the burden to show empirical evidence of procompetitive effects, as quick-look analysis in effect requires, there must be some indication that the court making the decision has properly identified the theoretical basis for the anticompetitive effects and considered whether the effects actually are anticompetitive. Where, as here, the circumstances of the restriction are somewhat complex, assumption alone will not do.

Cal. Dental, 526 U.S. at 775 n.12.

A quick-look approach might be justified if the joint venture in this case were a sham, or if the alleged agreement were a naked restraint, i.e., not reasonably necessary to achieve the efficiency-enhancing benefits of the joint venture. *See Major League Baseball Props., Inc. v. Salvino, Inc.*, 542 F.3d 290, 338 (2d Cir. 2008) (Sotomayor, J., concurring). The Commission, however, rejected the contention that the joint venture between Philips and Sony was a sham. And, as we have discussed, an agreement among joint venturers not to compete against the joint venture is not a naked restraint, because it provides assurance that the resources invested by one joint venturer will not be undermined or competitively exploited to the sole benefit of the other. *See id.* at 340 (noting that exclusivity and profit-sharing provisions are reasonably necessary to prevent the free-rider problem). Particularly when the purpose of the joint venture is to set standards for an industry, and choices must be made as to which technologies to promote and which to suppress, those choices must be supported equally by all participants to the standard-setting body in order to achieve successful creation and adoption of the standard.

See generally Rambus Inc. v. Infineon Techs. AG, 318 F.3d 1081 (Fed. Cir. 2003).⁸

In sum, Princo has failed to show that the putative agreement between Sony and Philips not to license the Lagadec technology for non-Orange-Book purposes had any market effect at all—actual or prospective. The record, and the findings of the Commission, make clear that the Lagadec technology lacked both the technical and the commercial prospects that would have made it a possible basis for a product that could compete with Orange-Book-compliant discs in the data storage market. For that reason, Princo failed to demonstrate that any agreement not to license Lagadec would have had the anticompetitive effects necessary to condemn that agreement under rule-of-reason analysis.

Accordingly, we conclude that even if Philips and Sony engaged in an agreement not to license the Lagadec patent for non-Orange-Book purposes, that hypothesized agreement had no bearing on the physical or temporal scope of the patents in suit, nor did it have anticompetitive effects in the relevant market. The asserted agreement between Philips and Sony therefore did not

⁸ In positing that the asserted agreement between Philips and Sony was unlawful, the dissent draws a distinction between an agreement that Sony would not compete with the joint venture and an agreement that Sony would not license the Lagadec patent to compete with the joint venture. That distinction is illusory. It would make no difference whether Sony developed the alternative technology itself or whether Sony facilitated the development of that technology by licensing a third party to do so; either way, Sony would be profiting at the expense of the joint venture.

constitute patent misuse and cannot justify rendering all of Philips's Orange Book patents unenforceable.

AFFIRMED

**United States Court of Appeals
for the Federal Circuit**

**PRINCO CORPORATION AND PRINCO AMERICA
CORPORATION,**
Appellants,

v.

INTERNATIONAL TRADE COMMISSION,
Appellee,

AND

U.S. PHILIPS CORPORATION,
Intervenor.

2007-1386

On Appeal from the United States International
Trade Commission in Investigation No. 337-TA-474.

PROST, *Circuit Judge*, with whom MAYER, *Circuit Judge*
joins, concurring-in-part.

I agree that a finding of patent misuse is unwarranted on this record because Princo failed to meet its burden of showing that any agreement regarding the Lagadec patent had anticompetitive effects. Princo's failure to make this threshold showing resolves this case. I therefore join Parts I and II-C of the majority's opinion.

As Part II-C explains, the Commission's factual findings on this issue are supported by substantial evidence. I part ways with the majority and dissent, however, over the other contours of the patent misuse doctrine. I doubt that the doctrine is as narrow or expansive as each respectively suggests.

This case arises at the uneasy intersection of anti-trust and patent law, in essence posing the novel question of whether (and if so, to what extent) patentee competitors may enter an agreement regarding the licensing of their patents. In my view, what distinguishes this case from *Motion Picture Patents*, *Carbice Corp.*, *Morton Salt* and their progeny is that the alleged agreement concerns patents and was entered into by the patents' respective owners. The putative agreement does not cover an unpatented product over which a patent owner is exercising control by virtue of market power or a patent licensing agreement. See *Dawson Chem. Co. v. Rohm & Haas Co.*, 448 U.S. 176, 202 (1980) (holding that the linkage of "two protected activities" in a single transaction does not constitute patent misuse); cf. *Motion Picture Patents*, 243 U.S. at 515-18; *Carbice Corp.*, 283 U.S. at 31-33; *Morton Salt*, 314 U.S. at 491-92. Here, Philips owned the Raaymakers patents, Sony the Lagadec patent. Philips and Sony were thus presumably free to license their patents to everyone—or no one. In asserting that the precedent of the Supreme Court and our court compel a finding of patent misuse, the dissent does not address how a patent owner's right to *exclude* others from using the invention could, and possibly should, affect the calculus in the antitrust and patent misuse contexts. Indeed, at first blush there seems little difference between the agreement allegedly entered into here and Sony granting an exclusive license to Philips on the Lagadec patent, which Philips then decides not to practice.

While I find it significant that the putative agreement concerned patents rather than unpatented technology, I do not share the majority's apparent view that antitrust considerations are an entirely "different issue," separate and apart from the question of whether there has been patent misuse. *See* Maj. Op. at 22-23. Whether use of a patent runs afoul of antitrust law seems in itself probative of whether the patent owner has also abused, or "misused," the limited monopoly granted by Congress. *See U.S. Gypsum Co. v. Nat'l Gypsum Co.*, 352 U.S. 457, 468, 472 (1957); *Mercoind Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661, 667 (1944); *cf. Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 134-35 (1969) (asking whether there had been patent misuse in determining whether the patentee had violated antitrust law); *Transparent-Wrap Mach. Corp. v. Stokes & Smith Co.*, 329 U.S. 637, 640-41 (1947). Moreover, I do not read Supreme Court precedent as necessarily foreclosing a finding of patent misuse based at least in part on finding an antitrust violation. As the Supreme Court explained in *United States v. United States Gypsum Co.*, 333 U.S. 364, 400 (1948), patents "grant no privilege to their owners of organizing the use of those patents to monopolize an industry through price control." The majority's limited focus on the Raaymakers patents seems to ignore that the challenged agreement could just as easily be framed as a decision to license some patents (Raaymakers) and an affirmative refusal to license another (Lagadec). By asking only whether the Raaymakers patents has been "leveraged," *see* Maj. Op. at 15, the majority may have unnecessarily narrowed the patent misuse inquiry—particularly when one can readily argue that the combined effect of an agreement to license the Raaymakers patents, but not license the Lagadec patent, enabled Philips to obtain the type of "market benefit beyond that which inheres in the statutory patent right" of either

patent, amounting to misuse. *Mallinckrodt*, 976 F.2d at 704; cf. *Hartford-Empire Co. v. United States*, 323 U.S. 387, 406-07 (1945).

Because we need not reach the issue, I would thus reserve judgment on the precise metes and bounds of the patent misuse doctrine.

**United States Court of Appeals
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2007-1386

On Appeal from the United States International Trade
Commission in Investigation No. 337-TA-474.

DYK, *Circuit Judge*, with whom GAJARSA, *Circuit Judge*,
joins, dissenting.

This case presents important questions concerning the
scope of the doctrine of patent misuse. The critical question
is whether the existence of an antitrust violation—in the
form of an agreement to suppress an alternative technology
designed to protect a patented technology from competi-

tion—constitutes misuse of the protected patents. The majority holds that it does not. This seems directly contrary to the Supreme Court’s view of patent misuse in its recent *Illinois Tool Works* decision, where the Court concluded that “[i]t would be absurd to assume that Congress intended to provide that the use of a patent that merited punishment as a felony [under the Sherman Act] would not constitute ‘misuse.’” *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 42 (2006).

The majority declines to give the patent misuse doctrine significant scope because it “is in derogation of statutory patent rights against infringement.” Majority Op. at 4. Evidently the majority thinks it appropriate to emasculate the doctrine so that it will not provide a meaningful obstacle to patent enforcement. Outside of unlawful tying arrangements and agreements extending the patent term, the majority would hold that antitrust violations are not patent misuse and would leave to private and government antitrust proceedings the task of preventing abuse of patent monopolies, enforcement that is likely inadequate to the task. Indeed, the majority goes so far as to suggest that the misuse doctrine be eliminated entirely. *Id.* at 19 n.2. I read the relevant Supreme Court cases and congressional legislation as supporting a vigorous misuse defense, clearly applicable to agreements to suppress alternative technology. The majority cabins the doctrine in contravention of this Supreme Court authority. I respectfully dissent.

I

U.S. Philips Corporation (“Philips”) commenced this proceeding alleging that Princo Corporation and Princo America Corporation (collectively, “Princo”) had infringed

Philips' Raaymakers patents.¹ Princo asserted a misuse defense. The overall issue is whether Philips has misused the asserted Raaymakers patents by (1) agreeing with Sony Corporation ("Sony") to jointly license the Raaymakers patents together with the Lagadec patent² and providing, as part of that agreement, that the alternative technology embodied in the Lagadec patent will not be licensed in competition with the Raaymakers technology, and (2) securing an agreement from the licensees of the Raaymakers and Lagadec patents barring them from using the Lagadec patent to develop an alternative technology that would compete with the Raaymakers technology.³ The majority holds that there is no patent misuse because the Lagadec patent has not itself been asserted in this proceeding, *see id.* at 23, and, alternatively, because "Princo also failed to show that the asserted agreement had any anticompetitive effects because . . . the Lagadec technology was not a viable potential competitor to the technology embodied in the Raaymakers patents," *id.* at 29.

The majority's first holding—that the agreements cannot infect the Raaymakers patents—rests on the resolution of an issue that apparently never occurred to Philips nor the International Trade Commission ("ITC") and was never briefed nor argued before the panel. When this case was

¹ U.S. Patent Nos. 4,999,825 and 5,023,856.

² U.S. Patent No. 4,942,565.

³ I, like the majority, assume the existence of such an agreement between Philips and Sony, which is not denied by Philips. The agreement with the licensees was specifically found by the ITC. In the following discussion, for convenience, I treat both agreements as established fact. The majority misreads the dissent and the original panel opinion as limited to concerns about the Philips/Sony agreement. *See Majority Op.* at 23, 26, 34.

before the panel, neither Philips nor the ITC urged that the failure to assert infringement of the Lagadec patent in the ITC proceedings barred a finding of patent misuse. The leading treatise on the interrelationship between patent law and antitrust law viewed the panel opinion here, holding the misuse doctrine applicable to agreements to suppress alternative technology, “as standing for the unexceptional proposition that patent licensing schemes are illegal where they are used as part of a broader effort to fix prices and restrict competition.” Herbert Hovenkamp et al., *IP and Antitrust* § 3.3g, at 3-42 to -43 (2d ed. 2010); see *Princo Corp. v. Int’l Trade Comm’n*, 563 F.3d 1301, 1314–15 (Fed. Cir. 2009). Now the court en banc holds that such agreements cannot constitute patent misuse. Contrary to the majority, the Supreme Court cases establish that license agreements that suppress alternative technologies can constitute misuse of the patents for the protected technology, and the regional circuits have agreed.

The majority’s second holding—that there is no misuse unless the accused infringer shows that the technology was, or would probably have become, commercially viable—is contrary to established patent misuse doctrine. That doctrine recognizes that antitrust violations may constitute misuse; that a presumption of anticompetitive effect flows from an agreement not to compete; and that the burden rests on the patent holder to justify such an agreement. Philips did not even attempt to make the required showing here.

II

At the outset, it is important to understand the extent to which the Raaymakers technology, incorporated into the so-called “Orange Book” standard and covered by the asserted patents, dominates the multibillion dollar market for re-

cordable compact discs (“CD-Rs”) and rewritable compact discs (“CD-RWs”). The first compact disc (“CD”) was developed in the 1970s. Consumers could use the original CDs to play music and other recorded material, but they could not record data on the CDs. There was therefore a substantial demand for more advanced technologies that would enable the user to record and store data on reusable CDs. Philips initially acted alone in attempting to develop a technology for recordable CDs. Eventually Philips developed the CD-R/RW technology with some assistance from a few of its competitors. CD-R technology allows consumers to purchase blank discs that they can fill with data. Similarly, CD-RW technology enables consumers to record, erase, and re-record data on discs. A key feature of CD-Rs and CD-RWs is that they are compatible on all CD audio players and CD-ROM drives.

Philips created a patent pool for the CD-R/RW technology with its competitors and offered joint licenses for their patents. Although Sony Corp., Taiyo Yuden Co. Ltd., Ricoh, and Yamaha all contributed patents to the Orange Book patent pool, Philips has been the sole company responsible for administering the CD-R/RW licensing programs and for entering agreements to license the packages. Philips has charged a very substantial royalty to companies using the Orange Book standard. The royalty rate has ranged from one-half to two-thirds the manufacturers’ selling price for the discs. This has enabled Philips and the other members of the patent pool to collectively secure hundreds of millions, if not billions, of dollars in revenue from the sale of those discs.

Despite the high licensing fees for the Orange Book standard, Philips’ Orange Book standard achieved market dominance. The CD-R and CD-RW technologies have revolutionized the storage, use, and transfer of computer data,

rapidly replacing the previous storage technology. *In re Certain Recordable Compact Discs & Rewritable Compact Discs*, No. 337-TA-474, slip op. at 386 (Int'l Trade Comm'n Oct. 24, 2003) (“*Initial Determination*”). By 2003 more than 100 manufacturers had received licenses to patents under the Orange Book standard. Billions of discs manufactured in accordance with this standard have been sold each year. Every CD-R or CD-RW disc now manufactured is produced according to the Orange Book standard. *See id.* at 390 (“All CD-Rs and CD-RWs sold in the marketplace must comply with Orange Book standards.”). All of the manufacturers in the United States, as well as in many other countries, are effectively required to license the Orange Book technology. As the ITC recognized in its Initial Determination, “[n]o one can manufacture or sell CD-R or CD-RW discs legally in the United States without taking a license to the Philips patents.” *Id.* And, “Philips has the power to exclude a company from entering the CD-R or CD-RW market.” *Id.* at 393. “Philips has market power in the United States market for licensing essential US patents for the manufacture of CD-R/RWs according to Orange Book standards because . . . there are no close substitutes for CD-R/RWs” *In re Certain Recordable Compact Discs & Rewritable Compact Discs*, Inv. No. 337-TA-474, slip op. at 27 (Int'l Trade Comm'n Mar. 25, 2004) (“*Final Determination*”). No competitive alternative to either the CD-R or CD-RW disc has been developed to the point of commercial viability.

However, Sony did in fact develop a *potential* alternative to a key aspect of the Orange Book technology covered by the Raaymakers patents. This technology is reflected in the Lagadec patent. Both the Raaymakers and Lagadec technologies are directed to solving a known problem necessary to record data on CDs. Specifically, during the course of developing the CD-R standard, Philips and Sony engineers realized they needed to identify ways to encode position

data on the “blank” or unrecorded CD-R/RWs so that the recorder could determine where along the spiral pregroove track its laser was positioned at any given time, or “absolute time” position data.⁴ Like the Lagadec technology, the Raaymakers technology encodes position data. The Lagadec and Raaymakers technologies differ in that Philips’ technology employs “frequency modulation,” an analog method of encoding information, whereas Sony’s technology employs a digital method.

Although the parties recognized that the Lagadec patented digital method had the potential to compete with the patented Raaymakers technology, Philips and Sony determined not to license the Lagadec patent as an alternative to the Raaymakers patents. Instead, they agreed as part of the overall Orange Book agreement not to license the Lagadec patent as a competitive technology. At the same time, the Philips licensing agreement for the Orange Book patent pool, which included the Lagadec patent, prohibited licensees (CD manufacturers) from using any of the patents for non-Orange Book purposes, thus precluding the licensees from developing alternatives to the Orange Book. *Initial Determination*, slip op. at 370 (“All of Philips’ CD-R and CD-RW licenses contain a field of use provision limiting the license grant to use of the patents to manufacture . . . CD-R or CD-RW discs that comply with the Orange Book Standard.”).

The rewards flowing to Sony from this series of agreements were considerable. In return for a minimal contribution to the Orange Book patent pool, Sony was rewarded a substantial portion of the royalties. For example, the La-

⁴ “Absolute time” refers to the fact that the laser’s location is expressed in terms of the time required to scan the spiral groove from the start of the disc to the current position.

gadic patent was the only essential Sony patent in the CD-RW pool.⁵ For this contribution Sony received 36 % of the royalties under the CD-RW patent pool. Philips' employees conceded that Sony employees "were more observers than real active developers of" the CD-RW format. J.A. 1830 (testimony of Dr. Jacques Heemskerk); *see also* J.A. 3254 (explaining that the CD-RW format was "written in close cooperation [sic] with Ricoh and with the passive support of Sony."). The situation was not much different with respect to the CD-R pool where, out of eleven supposedly essential patents, only two of these were Sony patents, the Lagadec patent and Patent No. 5,126,994 (the "Ogawa" patent).⁶ *See, e.g.*, J.A. 3534–65, J.A. 6592–6636.

The effect of these agreements was to protect the Philips Raaymakers technology from any actual or potential competition. As no one could license the Lagadec patent outside of the Orange Book patent pool, the patent was rendered useless as an alternative technology.

⁵ As explained in the panel opinion, the Lagadec patent was included in the patent pool because there was a concern that it might cover aspects of the Raaymakers technology, not because the Orange Book standard utilized the basic Lagadec technology. As noted, licensees were prohibited from using the Lagadec technology in competition with the Orange Book standard.

⁶ The ALJ found that the Ogawa patent was improperly classified as essential given that economically viable alternatives to this patented technology existed outside the pool. *Initial Determination*, slip op. at 212–13. In its review, the ITC took no position on the ALJ's analysis of this patent. *Final Determination*, slip op. at 50–51.

III

Princo manufactures CDs covered by the Raaymakers and Orange Book patents. It declined to pay royalties on those patents. Philips initiated a proceeding before the ITC seeking to exclude Princo's products from the United States pursuant to section 337(a)(1)(B) of the Tariff Act of 1930, 19 U.S.C. § 1337(a)(1)(B). Princo asserted a misuse defense. The ITC initially found misuse because of patent tying by Philips—the practice of tying patents essential to practicing the Orange Book to those that were not essential. *Final Determination*, slip op. at 4–5. We concluded that there had been no unlawful tying with respect to the patents then in question, and remanded for a determination of whether Philips had engaged in other activities that constituted misuse. *U.S. Philips Corp. v. Int'l Trade Comm'n*, 424 F.3d 1179, 1197–99 (Fed. Cir. 2005). The ITC rejected Princo's contention that including the Lagadec patent in the patent pool constituted improper tying (an issue not originally addressed) and that agreements not to license the Lagadec patent in competition with the Orange Book technology were also not misuse. The original panel opinion agreed that the ITC had properly rejected the Lagadec tying claim, but erred in rejecting the misuse claim based on the agreement not to license the Lagadec patent as an alternative technology. The panel remanded to determine whether such an agreement existed and whether there was an anticompetitive effect. The en banc court holds that the agreements not to license the Lagadec patent do not constitute misuse.⁷ I disagree.⁸

⁷ The majority does not disturb the original panel opinion's ruling that the inclusion of the Lagadec patent in the patent pool did not constitute unlawful patent tying. The permissibility of including Lagadec in the pool does not answer the question of whether Philips could secure agree-

IV

The majority first holds that even if the anticompetitive behavior alleged here constitutes patent misuse (an issue addressed in the next section), this conduct does not involve misuse of the asserted Raaymakers patents, but only of the Lagadec patent. The Raaymakers patents can thus be enforced. However, it is clear that if the Philips/Sony agreement and the Philips agreements with licensees constituted misuse, they constituted misuse of the Raaymakers patents. The agreements to suppress the Lagadec technology were not separate or collateral agreements, as the majority suggests, but were part and parcel of the same course of conduct designed to protect the Raaymakers patents from competition from the alternative Lagadec technology. That constitutes misuse of the Raaymakers patents.

Patent misuse is defined as extending the scope of a patent beyond the monopoly conferred by the patent laws. See *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 136 (1969). As the Supreme Court stated in *United States v. Unis Lens Co.*, “the particular form or method by which the monopoly is sought to be extended is immaterial.” 316 U.S. 241, 251–52 (1942).

ments from Sony and the licensees not to use the Lagadec technology for non-Orange Book purposes.

⁸ While a remand to determine the existence of the Philips/Sony agreement under my view would still be necessary, even though Philips has not disputed the existence of that agreement, based on the subsequent briefing I am now convinced that there is no need for a remand on the issue of anticompetitive effects, as I discuss below.

As the majority points out, *see* Majority Op. at 15–16, many of the misuse cases have involved assertions that the asserted patent was used to gain a broader monopoly by tying the licensing of patent rights to the purchase of an unpatented product or by agreeing to extend the patent term. *See, e.g., Brulotte v. Thys Co.*, 379 U.S. 29, 33 (1964); *Transparent-Wrap Mach. Corp. v. Stokes & Smith Co.*, 329 U.S. 637, 644 (1947). The issue here is whether licensing agreements that are designed to protect patented technologies from competition and thereby extend their monopoly should fare any better. In holding that such licensing agreements do not constitute patent misuse, the majority ignores binding Supreme Court precedent.

The Supreme Court in *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 456–57 (1940), made clear that patent misuse occurs when patent licensing agreements are used “to control conduct by the licensee not embraced in the patent monopoly.” In *United States v. United States Gypsum*, 333 U.S. 364 (1948), the Court explicitly held that the use of license agreements to fix prices and suppress competition from alternative technologies constituted patent misuse. There, U.S. Gypsum, which produced gypsum and gypsum products, found itself in a situation similar to Philips. It had acquired the “most significant” patents covering so-called closed edge boards. *Id.* at 368. It acquired additional significant patents from co-conspirators and licensed those patents to virtually the entire industry. The patented, closed edge boards competed with unpatented, open edge boards. U.S. Gypsum, companies that had assigned patents to U.S. Gypsum, and the other manufacturers licensed by U.S. Gypsum agreed to suppress competition from open edge boards and maintain higher prices by concertedly entering into industry-wide patent licensing agreements that effectively eliminated open edge boards from the market. The Court held that these licensing

agreements to suppress competition violated the antitrust laws and constituted misuse of the closed edge board patents: “the testimony of the witnesses is ample to show that there was an understanding, if not a formal agreement, that only patented board would be sold. Such an arrangement in purpose and effect increased the area of the patent monopoly and is invalid.” *Id.* at 397. The Court explained that there is

no support for a patentee, acting in concert with all members of an industry, to issue substantially identical licenses to all members of the industry under the terms of which the industry is completely regimented, the production of competitive unpatented products suppressed, a class of distributors squeezed out, and prices on unpatented products stabilized.

Id. at 400. Contrary to the majority, *Gypsum* is not simply an antitrust case. The *Gypsum* case was specifically cited by the Supreme Court in *Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation*—the most recent Supreme Court articulation of patent misuse—as one of “the series of decisions in which the Court has condemned attempts to broaden the physical or temporal scope of the patent monopoly.” 402 U.S. 313, 343, 344 n.40 (1971). *Gypsum*, together with the panel decision in this case, has also been cited by the leading treatise to exemplify the point that agreements not to compete can constitute misuse of patents. Hovenkamp et al., *supra*, § 3.3g, at 3-42.

A number of courts have followed *Gypsum* and held that license agreements suppressing the manufacture or sale of competing goods constitute misuse of the licensed patents—whether the non-compete agreement binds the licensees or the licensor. One of these decisions is *Compton v. Metal*

Products, Inc., 453 F.2d 38 (4th Cir. 1971), a case explicitly rejected by the majority. See Majority Op. at 23 n.4. In *Compton*, as part of a license agreement, the patent holder agreed not to compete with the licensee for a period of years. 453 F.2d at 44. In holding that this agreement constituted patent misuse, the Fourth Circuit explained that

the agreement falls outside the limited monopoly granted by the patent laws, because in exclusively licensing his patents, the patentee himself could neither require non-competition beyond the term of the patents nor as to items not covered by the patents. We think that by agreeing to restrictions on his own competition which he could not compel of others, the patentee has extended the monopoly granted by the patent laws beyond its legal bounds
. . . .

Id. at 44–45 (citation omitted). Contrary to the majority, *Compton* does not represent an “expansive patent misuse theory,” see Majority Op. at 23 n.4, but is consistent with the Supreme Court’s *Gypsum* case as well as other court of appeals cases that hold that license agreements not to compete constitute misuse of the licensed patents. See *Berlenbach v. Anderson & Thompson Ski Co.*, 329 F.2d 782, 784 (9th Cir. 1964) (holding that a non-competition clause in a patent license constitutes misuse without proof of substantial lessening of competition); *Nat’l Lockwasher Co. v. George K. Garrett Co.*, 137 F.2d 255, 257 (3d Cir. 1943) (finding misuse of a patent where patent licensees had agreed to “make and sell no form of non-entangling Spring Washers except such as are covered by said patent”); *Krampe v. Ideal Indus.*, 347 F. Supp. 1384, 1387 (N.D. Ill. 1972) (holding a non-competition clause in a patent licensing agreement binding the licensee not to sell competing products constitutes patent misuse); *Park-In Theatres v.*

Paramount Richards Theatres, 90 F. Supp. 730 (D. Del. 1950) (holding a non-competition clause in a patent license agreement binding the licensee not to sell or promote competing products constitutes misuse), *aff'd*, 185 F.2d 407 (3d Cir. 1950); *see also SCM Corp. v. Xerox*, 645 F.2d 1195, 1204 (2d Cir. 1981) (“While . . . a concerted refusal to license patents is no less unlawful than other concerted refusals to deal, in such cases [where the parties act in concert] the patent holder abuses his patent by attempting to enlarge his monopoly beyond the scope of the patent granted him.” (emphasis added)). Indeed, the leading treatise on patent law states that “prohibiting production or sale of competing goods” is a “classic act of misuse” and notes that the “courts have consistently taken the view that a provision in a patent license requiring a party not to deal in products that compete with the patented product constitutes misuse per se.” 6 Donald S. Chisum, *Chisum on Patents* § 19.04 [3], [3][b], at 19-451, -463 (2010). If an agreement to suppress competition in an unpatented product to protect a patented product constitutes misuse, it is clearly misuse where the agreement involves the suppression of one patented technology to protect another patented technology from competition, as is the case here.

The same approach has been taken in copyright law where courts have found copyright misuse based on suppression of competing products. For example, in *Lasercomb America, Inc. v. Reynolds*, the Fourth Circuit held that the plaintiff’s requirement in its standard licensing agreement forbidding the licensee and all its employees from developing any kind of software competitive with the plaintiff’s application constituted misuse and rendered the copyrighted software unenforceable. 911 F.2d 970, 973, 979 (4th Cir. 1990). The Ninth Circuit in *Practice Management Information Corp. v. American Medical Association* held that licensing a copyrighted product in exchange for an

agreement not to use a competitor's product constituted misuse and rendered the copyright unenforceable. 121 F.3d 516, 520–21 (9th Cir. 1997). These cases establish that, regardless of the form of intellectual property involved, a party's efforts to use its intellectual property to suppress a competitive product constitutes unacceptable misuse.

The majority attempts to distinguish *Gypsum* and apparently also its progeny by suggesting that they involve a single agreement, whereas here the non-compete agreements with respect to the Lagadec patent were independent of or collateral to the agreements with respect to the Raaymakers patents. *See* Majority Op. at 25–26.

What the majority ignores is that the non-compete agreements here, as in *Gypsum* and the court of appeals misuse cases, are part and parcel of the agreements governing the asserted patents (here, the Raaymakers patents). The agreement between Philips and Sony with respect to the suppression of the Lagadec technology appears in the same letter agreement between Philips and Sony that provided for the pooling of their patents, including the Raaymakers patents, and the division of royalties.⁹ The

⁹ The parties entered into the letter agreement on September 7, 1993 (the “1993 agreement”). The 1993 agreement gave Philips an “exclusive right to license such Patent Rights . . . for use in Articles listed in Appendix 2.” J.A. 3319. Appendix 2 lists “CD-WO” (*i.e.*, CD-R) “Disc” and “Recorder.” *Id.* at 3321. That agreement further noted that “we confirm with respect to the aforementioned Patent Rights . . . that we will license such Patent Rights outside the jointly agreed upon system standards only in cases which can reasonably be considered exceptional.” *Id.* at 3320. As noted earlier, both the majority and I assume for the purposes of this appeal that the agreement obligated Sony to refrain from licensing the Lagadec patent for any non-Orange Book purpose.

agreement between Philips and its licensees not to use the Lagadec technology in competition with the Raaymakers technology appears in the agreements licensing the Raaymakers technology. The overall effect of the two agreements was to prevent competitors from utilizing the alternative Lagadec technology and to protect the licensed Raaymakers patents from competition with the Lagadec technology. The licenses to the asserted patents were “condition[ed] . . . so as to control conduct by the licensee not embraced within the patent monopoly” of the asserted patents. *See Ethyl*, 309 U.S. at 456–57. The agreements with respect to Raaymakers and Lagadec cannot be treated separately, as the Supreme Court held in *Gypsum* and as the circuit courts held in the other cited cases. Nor is it significant that two separate agreements (the licensee agreements and the Philips/Sony agreement) are involved. In *Gypsum* itself, the agreements to suppress the competing open edge boards were in fact not even formally part of the license agreements, but were treated together because they were directed to the same course of conduct. *See U.S. Gypsum*, 333 U.S. at 384–85. Thus, the agreement to promote the Raaymakers patents cannot be separated from the agreement to suppress the Lagadec patent.¹⁰ This misconduct renders both the Raaymakers and Lagadec patents unenforceable.¹¹

¹⁰ Indeed, a similar issue was specifically addressed in *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488 (1942). In *Morton Salt*, the patent holder had licensed patents for a salt dispenser on condition that the licensees use only Morton’s salt in the dispensers. Morton argued that the agreement with respect to the salt dispensers should be treated separately and that the anticompetitive conduct at most only rendered the salt purchase agreement unenforceable; it did not render the salt dispenser patent unenforceable. The Court in *Morton Salt* disagreed, holding that the salt dispenser patent was itself unenforceable. *Id.* at 492–94. Here, as in *Morton Salt*, the agreement with

The majority alternatively suggests that the existence of an antitrust violation involving an agreement not to compete and the extension of the patent monopoly are not enough to establish misuse. Rather, misuse can only exist if there is an improper leveraging of the patent. In the majority's view, "[w]hat patent misuse is about . . . is 'patent leverage,' i.e., the use of the patent power to impose overbroad conditions on the use of the patent in suit that are 'not within the reach of the monopoly granted by the Government.'" Majority Op. at 24. While the misuse cases cited by the majority refer to patent leveraging, that is simply because leveraging of the patent—in tying and patent term extension cases—is a necessary part of the antitrust violation. Those cases do not suggest that leveraging is a necessary element where there is an agreement not to compete with the asserted patent. With one exception, *Gypsum* and the other court of appeals patent misuse cases discussed above did not rest on any finding of patent leveraging, but rather on the existence of an agreement not to compete that protected the asserted patents from competition. The one

respect to the suppression of the Lagadec patent cannot be separated from the Raaymakers patents.

¹¹ The concurrence suggests that "at first blush there seems little difference between the agreement allegedly entered into here and Sony granting an exclusive license to Philips on the Lagadec patent, which Philips then decides not to practice." Concurring Op. at 2. The difference here is two-fold: Philips did not on its own simply decide not to practice the Lagadec patent in competition with the Orange Book; Philips agreed with Sony that it would not do so. Philips and Sony also agreed not to grant manufacturers licenses to practice Lagadec in competition with the Orange Book. Thus, it was an agreement to suppress a potentially competitive technology from ever reaching the market. Such a license agreement clearly lies outside the bounds of the patent owner's right to exclude others from using his or her invention.

concerted action case that does mention leveraging simply assumes that leveraging is established by proof that the non-compete agreement was secured by compensating the licensee with a patent license. *See Nat'l Lockwasher*, 137 F.2d at 256. Here too the Orange Book licensees were in effect compensated for their agreement not to use Lagadec as an alternative to the Orange Book technology with a license to the Raaymakers patents, and Sony was compensated for its agreement not to license Lagadec for non-Orange Book uses by license fees from the Raaymakers patents. That is sufficient proof of leveraging if proof of leveraging is required at all in concerted action cases.

The majority suggests that asserting a patent misuse defense against the patent covering the suppressed technology (here, Lagadec) or an antitrust suit would provide a remedy for anticompetitive behavior. *See Majority Op.* at 23, 26, 28 n.6. The clear ineffectiveness of both of these remedies demonstrates the importance of a misuse defense against the protected patents (here, the Raaymakers patents). There is no realistic prospect of securing a misuse determination with respect to the suppressed patent. This is because there is no need for Philips to assert the Lagadec patent and open itself to a misuse defense. The mere threat of an infringement suit is typically sufficient to prevent a potential competitor from devoting the resources necessary to develop an alternative technology; the technology is thus suppressed at the outset. So too a potential competitor (wishing to secure an advance determination of invalidity) has no remedy by way of declaratory judgment to secure a determination that the patent for the alternative technology is unenforceable given our jurisprudence demanding a showing of a concrete plan to enter the market as the condition for testing patent validity and enforceability. *See, e.g., Benitec Austl., Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340, 1346–47 (Fed. Cir. 2007).

The antitrust laws also provide no adequate remedy for the suppression of competition. Private enforcement of the antitrust laws in this context is virtually impossible. Potential purchasers of the alternative product have no remedy.¹² The ability of even a competitor to sue for damages is highly problematic given the early stage of development of the Lagadec technology. And injunctive relief at the request of a competitor is unlikely to take effect in a time frame that would allow for the development of an alternative technology given likely litigation delays. The difficulty of securing a misuse determination with respect to the suppressed patent or traditional antitrust relief underscores the importance of applying the doctrine of patent misuse to the protected patents. Unless the protected patents are held unenforceable, there will be no adverse consequence to the patent holder for its misconduct nor will the patent misuse be remedied.

Contrary to the majority, the enactment of amendments to 35 U.S.C. § 271 in 1988 does not support the majority's position. While the majority is correct that the legislation was designed to cabin the misuse doctrine, it did so only by making clear that some practices that did not constitute antitrust violations did not amount to misuse.¹³ The legislation did not remotely suggest that antitrust violations did not constitute misuse. It is quite clear that Congress in-

¹² See generally *Ill. Brick Co. v. Illinois*, 431 U.S. 720, 728–29 (1977) (prohibiting an indirect purchaser from suing a manufacturer to recover gains the manufacturer obtained by violating the antitrust laws).

¹³ The one possible exception is the provision in § 271(d)(5) providing that tying is not misuse without a showing of market power. But the Supreme Court in *Illinois Tool Works* changed antitrust law to make it consistent with § 271(d). See 547 U.S. at 40–43.

tended that the patent misuse doctrine could extend to a refusal to license patented technologies by parties acting in concert. In 1988, Congress enacted 35 U.S.C. § 271(d)(4), providing that no patent owner shall be deemed guilty of misuse by reason of having “refused to license or use any rights to the patent.” Pub. L. No. 100-703, § 201, 10 Stat. 4674, 4676 (1988) (codified at 35 U.S.C. § 271(d)(4)). The implication from the face of the statute is that an *agreement* not to license a patent could, however, be patent misuse, and the legislative history confirms what is plain from the language.

Congressman Kastenmeier, the author of this amendment, explained that “the underlying policy for [the misuse] doctrine has been an effort by the courts to prevent a person who has obtained a Government granted right to exclude competition from overreaching the scope of the patent.” 134 Cong. Rec. 32,294 (1988). He noted in particular that the misuse “doctrine has been applied to a wide variety of circumstances including . . . use of *covenants not to compete*.” *Id.* at 32,294–95 (emphasis added).

Kastenmeier also stated that “[c]odification of the ‘refusal to use or license’ as not constituting patent misuse is consistent with the current caselaw and makes sense as a matter of public policy.” 134 Cong. Rec. at 32,295. He cited *SCM* in support of this proposition. *Id.* Significantly, the court in *SCM* explained that “[w]hile . . . a *concerted refusal to license patents is no less unlawful than other concerted refusals to deal*, in such cases [where the parties act in concert] the patent holder abuses his patent by attempting to enlarge his monopoly beyond the scope of the patent granted him.” 645 F.2d at 1204 (emphasis added). The legislative history thus confirms that an agreement to suppress a competitive patent, which would enlarge the

patent holder's monopoly beyond the scope of the patent, would constitute patent misuse.

As noted above, in *Illinois Tool Works* the Supreme Court in interpreting § 271(d) concluded that it would be “absurd” to suggest that Congress intended that agreements violating the Sherman Act would not constitute patent misuse. *See Ill. Tool Works*, 547 U.S. at 42. In holding that Philips' anticompetitive behavior cannot constitute patent misuse because the Lagadec patent was not asserted, the majority has significantly narrowed the patent misuse doctrine and has disregarded governing Supreme Court authority and congressional intent.

V

I turn next to the majority's second holding that “even if Philips and Sony engaged in an agreement not to license the Lagadec patent for non-Orange-Book purposes, that hypothesized agreement . . . did [not] have anticompetitive effects in the relevant market.” Majority Op. at 41. This is so, according to the majority, because “[w]hat Princo had to demonstrate was that there was a ‘reasonable probability’ that the Lagadec technology, if available for licensing, would have matured into a competitive force in the storage technology market.” *Id.* at 38. In addressing the issue of anticompetitive effects, we look to antitrust authorities. As the Chisum treatise recognizes, “[i]f a practice does rise to the level of an antitrust violation, it will also constitute misuse.” 6 Chisum, *supra*, § 19.04 [2], at 19-442.¹⁴ As noted earlier,

¹⁴ As the ITC has recognized here, our court “has indicated that the rule of reason standard to be applied is that developed in antitrust law.” *In the Matter of Certain Recordable Compact Discs and Rewritable Compact Discs*, Inv. No. 337-TA-474, slip op. at 52 (Int'l Trade Comm'n Feb. 5, 2007) (“*February 2007 ITC Determination*”); *see also*

this essential precept of patent misuse doctrine was confirmed by the Supreme Court in *Illinois Tool Works*. See 547 U.S. at 42. Indeed, Supreme Court cases, as well as our own cases and other circuit cases, suggest the misuse doctrine should be broader than the antitrust prohibitions.¹⁵ As we explained in *C.R. Bard, Inc. v. M3 Systems, Inc.*, “[p]atent misuse is viewed as a broader wrong than antitrust violation because of the economic power that may be derived from the patentee’s right to exclude. Thus misuse may arise when the conditions of antitrust violation are not met.” 157 F.3d 1340, 1372 (Fed. Cir. 1998). The requirement of establishing an “anticompetitive effect” is necessarily satisfied by showing that the practice would violate the antitrust laws.

Significantly, neither the ITC nor Philips argued that the agreement would not violate the antitrust laws. See En Banc Oral Arg. at 27:03–:08 (counsel for the ITC) (“Your honor . . . that wasn’t an issue before the Commission.”); *id.* at 43:35–:39 (counsel for Philips) (conceding that an arrangement between two companies to pool their patents, which were developed independently, and to set a standard “could be [an antitrust violation] under a particular [set of] facts or circumstances”).

Hovenkamp et al., *supra*, § 3.2d, at 3-11 (explaining that the misuse analysis is “largely coextensive with antitrust doctrine”).

¹⁵ See *Zenith Radio*, 395 U.S. at 140–41 (explaining that the lower court could find patent misuse on remand even if the alleged conduct did not constitute an antitrust violation); *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1339 (Fed. Cir. 2006) (quoting *C.R. Bard*, 157 F.3d at 1372); *C.R. Bard*, 157 F.3d at 1372; *Practice Mgmt.*, 121 F.3d at 521; *Lasercomb*, 911 F.2d at 978; *Senza-Gel Corp. v. Seiffhart*, 803 F.2d 661, 668 (Fed. Cir. 1986).

Under antitrust analysis, an agreement such as that between Philips and Sony to suppress the Lagadec patent may appropriately be evaluated under the rule of reason. But even under the rule of reason, agreements between competitors not to compete are classic antitrust violations. *See, e.g., United States v. New Wrinkle, Inc.*, 342 U.S. 371, 380 (1952) (“An arrangement was made between patent holders to pool their [competing] patents and fix prices on the products for themselves and their licensees. The purpose and result plainly violate the Sherman Act.”); *Standard Oil Co. (Ind.) v. United States*, 283 U.S. 163, 175 (1931) (“[T]he primary defendants own competing patented processes for manufacturing an unpatented product . . . ; and agreements concerning such processes are likely to engender the evils to which the Sherman Act was directed.”).

Such anticompetitive behavior designed to foreclose competition from other technologies or increase prices has been a particular problem in the patent area because patents give competitors the legal right to foreclose competition. But while it is perfectly lawful for the owner of a patent to refuse to license it for any reason or no reason at all, *see* 35 U.S.C. § 271(d), this right does not extend to agreements among competitors. The Supreme Court recently confirmed that agreements between separate actors with respect to intellectual property licensing are invalid if they fail the rule of reason analysis. *See Am. Needle, Inc. v. Nat’l Football League*, 130 S. Ct. 2201, 2206–07 (2010). And the Court has held that patent pooling agreements involving agreements not to compete violate the antitrust laws. *See New Wrinkle*, 342 U.S. at 380; *Standard Oil*, 283 U.S. at 175. Agreements not to compete are a matter of particular concern where, as here, the competitors collectively enjoy a monopoly position and set standards for an industry. Agreements between competitors to engage in standard setting may force an entire industry to adhere to a particu-

lar standard, effectively foreclosing competition from alternatives. Indeed, the Supreme Court has routinely condemned efforts to use standard-setting agreements to suppress competition of alternative products. *See Am. Soc’y of Mech. Eng’rs v. Hydrolevel Corp.*, 456 U.S. 556, 571 (1982) (cautioning that “a standard-setting organization . . . can be rife with opportunities for anticompetitive activity,” which can give members “the power to frustrate competition in the marketplace” and harm competitors); *Standard Sanitary Mfg. Co. v. United States*, 226 U.S. 20, 48–49 (1912). Most significantly, as the Supreme Court decision in *Gypsum* and the court of appeals cases cited earlier confirm, these basic principles apply in concerted action cases involving the suppression of alternative technology.

Despite this long history of condemning agreements to suppress competitive technologies, the majority holds that there was no misuse here. The majority recognizes that the Lagadec technology provided an alternative to the Raaymakers technology,¹⁶ but the majority finds no misuse because Philips and Sony were involved in a joint venture and there has been no showing that the Lagadec technology was commercially viable or probably would have become so. The majority’s analysis of anticompetitive effects rests on three fundamental errors.

First, the majority errs in holding that the burden rests on the alleged infringer, Princo, to show anticompetitive effects. While the burden rests on Princo to show patent misuse in general and an antitrust violation in particular, Princo’s initial burden is satisfied by establishing the existence of an agreement to suppress a competitive technology.

¹⁶ *See also February 2007 ITC Determination*, slip op. at 24 (“Lagadec constitutes, at best, a substitute technology . . .”).

Where an agreement is considered “inherently suspect,” courts apply a “quick look” rule of reason analysis. An agreement is inherently suspect “[i]f, based upon economic learning and the experience of the market, it is obvious that a restraint of trade likely impairs competition.” *PolyGram Holding Inc. v. Fed. Trade Comm’n*, 416 F.3d 29, 36 (D.C. Cir. 2005). Under such an agreement, “no elaborate industry analysis is required to demonstrate the anticompetitive character of such an agreement.” *NCAA v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 109 (1984) (citations omitted). “[A]n agreement not to compete in terms of price or output” is inherently suspect. *Id.* The agreement to suppress the Lagadec patent, a competing technology, surely falls within this category. *See Cal. Dental Ass’n v. Fed. Trade Comm’n*, 526 U.S. 765, 769–71 (1991) (describing numerous cases in which the Supreme Court and the courts of appeals have applied the “quick look” analysis to anticompetitive agreements); En Banc Br. of Amicus Fed. Trade Comm’n 25 (“On its face, an agreement between Philips and Sony . . . that the latter would withhold its technology from the market is ‘an agreement not to compete in terms of price or output.’” (quoting *NCAA*, 468 U.S. at 109)).¹⁷

¹⁷ An inherently suspect restraint on competition requires no showing by the plaintiff of market power. *See Cal. Dental*, 526 U.S. at 779 (“[A] challenge to a ‘naked restraint on price and output’ need not be supported by ‘a detailed market analysis’ in order to ‘requir[e] some competitive justification’” (quoting *NCAA*, 468 U.S. at 110)); *PolyGram*, 416 F.3d at 36. If a restraint does not qualify as inherently suspect, the plaintiff will need to demonstrate anticompetitive effect either “indirectly by proving that the defendant possessed the requisite market power within a defined market or directly by showing actual anticompetitive effects.” *Law v. NCAA*, 134 F.3d 1010, 1019 (10th Cir. 1998); *see Fed. Trade Comm’n v. Ind. Fed’n of Dentists*, 476 U.S. 447, 460–61 (1986); Hovenkamp et al., *supra*, § 30.3(b), at 30-10. Even if the agreements here are

Competitive harm is thus presumed, and the burden falls on *Philips* to “come[] forward with some plausible (and legally cognizable) competitive justification for the restraint.” *PolyGram*, 416 F.3d at 36; see *NCAA*, 468 U.S. at 110 (“This naked restraint on price and output requires some competitive justification even in the absence of a detailed market analysis.”); *id.* at 113 (“[T]hese hallmarks of anticompetitive behavior place upon petitioner a heavy burden of establishing an affirmative defense which competitively justifies this apparent deviation from the operations of a free market.”); En Banc Br. of Amicus Fed. Trade Comm’n 25–26 (explaining that because the agreement with Sony to suppress the Lagadec patent was inherently suspect, the burden would be on Philips to show that the agreement was not anticompetitive).

Such justification “may consist of plausible reasons why practices that are competitively suspect as a general matter may not be expected to have adverse consequences in the context of the particular market in question, or . . . may consist of reasons why the practices are likely to have beneficial effects for consumers.” *PolyGram*, 416 F.3d at 36. “If no legitimate justifications are set forth, the presumption of adverse competitive impact prevails and ‘the court condemns the practice without ado.’” *United States v. Brown Univ.*, 5 F.3d 658, 669 (3d Cir. 1993) (quoting *Chi. Prof’l Sports Ltd. P’ship v. NBA*, 961 F.2d 667, 674 (7th Cir. 1992)). Given the inherently suspect nature of the agree-

not inherently suspect, the ITC found that “Philips has market power in the United States market for licensing essential US patents for the manufacture of CD-R/RWs according to Orange Book standards because . . . there are no close substitutes for CD-R/RWs (ID at 160–64).” *Final Determination*, slip op. at 27. This ITC finding was sustained by our court in 2005. *U.S. Philips Corp.*, 424 F.3d at 1186.

ments to suppress the Lagadec technology, Princo has satisfied its burden, and Philips has the burden to establish a justification or lack of anti-competitive effects.¹⁸

Second, the majority appears to suggest that the “quick look” analysis should not apply and that Princo had the burden of demonstrating that the agreement to suppress the Lagadec technology could not be justified as part of the Philips/Sony joint venture agreement. *See* Majority Op. at 30–34, 39–41. While in theory procompetitive benefits from a joint venture could justify certain ancillary restraints in some circumstances, the burden remains on the party seeking to justify the restraint to establish precompetitive benefits. In fact, “joint ventures have no immunity from the antitrust laws.” *NCAA*, 468 U.S. at 113. The Supreme Court has recently made clear that otherwise anticompetitive agreements with respect to intellectual property are not justified simply because they are part of a joint agreement. In *American Needle*, a professional football league, its teams, and a corporate entity the teams formed to manage their intellectual property were sued by one of their licensees for allegedly violating § 1 of the Sherman Act, 15 U.S.C. § 1. 130 S. Ct. at 2206. The defendants asserted

¹⁸ The majority relies on various cases to support its theory that “Princo had the burden of showing that the hypothesized agreement had an actual adverse effect on competition in the relevant market.” *See* Majority Op. at 37–38. However, none of these cases involved an agreement not to compete or suggested there is a burden on the challenging party to establish that inherently suspect agreements had actual anticompetitive effects in the marketplace under the “quick look” rule of reason analysis. For example, the majority relies on *California Dental*, 526 U.S. 765. But *California Dental* involved not simply an agreement not to compete, but an agreement not to engage in certain types of potentially deceptive advertising. That agreement has no resemblance to the non-compete agreements here.

that their licensing activities were beyond the coverage of § 1 of the Sherman Act because they were collectively acting as a single entity. The Supreme Court disagreed, stating that “[t]he mere fact that the teams operate jointly in some sense does not mean that they are immune” from the anti-trust laws. *Id.* at 2214.

Rather, a non-compete agreement arising out of a joint venture must still pass the rule of reason by providing some kind of justification, such as “where the agreement . . . is necessary to market the product at all.” *See Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 23 (1979); *see also Am. Needle*, 130 S. Ct. at 2216–17; *Texaco, Inc. v. Dagher*, 547 U.S. 1, 7 (2006). But here, as in *American Needle*, “it simply is not apparent that the alleged conduct was necessary at all.” *See Am. Needle*, 130 S. Ct. at 2214 n.7. Even if a joint venture were necessary to produce the CD-R/RW standard, it does not follow that concerted activity in marketing, and suppressing, intellectual property was necessary to produce the standard. *See id.*; *Major League Baseball Props., Inc. v. Salvino*, 542 F.3d 290, 339 (2d Cir. 2008) (Sotomayor, J., concurring in the judgment) (“[A] restraint that is unnecessary to achieve a joint venture’s efficiency-enhancing benefits may not be justified based on those benefits.”); *United States v. Visa U.S.A.*, 344 F.3d 229, 240–41 (2d Cir. 2003); *Law v. NCAA*, 134 F.3d 1010, 1019 (10th Cir. 1998). At oral argument before the panel, counsel for Philips conceded that he could think of no competitive justification for the restraint, and Philips has pointed to no record evidence that the suppression agreement was necessary to serve the joint venture’s legitimate goals.

The majority asserts that the agreement in question did no more than prevent Sony from competing with the joint venture, an agreement that the majority views as a legitimate ancillary restraint. *See Majority Op.* at 29, 33–34, 40.

There was no overall agreement that prevented Sony from competing with the joint venture, and the apparent agreement in 1993 to suppress Lagadec came well after the development of the Lagadec technology and its rejection for the Orange Book in 1987. There was, in short, no showing that suppression of Lagadec was necessary to achieve the joint venture's legitimate goals. Moreover, the majority ignores the fact that the Raaymakers patents and the Lagadec patent in combination prevented others from competing without a patent license. The Philips agreement with its licensees barred all CD manufacturers from using Lagadec as a competitive technology, and the Philips/Sony agreement not only barred Sony from competing, but also barred Sony from authorizing others to do so. It is one thing for Philips and Sony to agree that Sony would not compete; it is quite another to use the patent monopoly to prevent anyone from utilizing a competitive technology to compete with the joint venture and thus to preserve Phillips' virtual monopoly on recordable CD technology. Such agreements cannot be justified simply by relying on the legitimacy of non-compete agreements with the joint venture participants.¹⁹

¹⁹ Nor is this a situation in which the Lagadec technology was jointly developed by Philips and Sony, as the majority suggests. *See* Majority Op. at 30–32. In fact, the record is clear that the Lagadec technology was separately developed by Sony. *See* J.A. 943 (describing solutions for encoding position data developed by Sony and presented to Philips, including the Lagadec solution). Even after the Lagadec technology was rejected for the Orange Book standard, Sony continued to pursue the technology, and applied for a U.S. patent over seven months after the Raaymakers technology was adopted for the Orange Book and the Lagadec technology was rejected. As noted on page 32, *infra*, the U.S. patent reflected improvements in the Lagadec technology.

Third, the majority holds that the suppression of an alternative technology violates the antitrust laws and constitutes misuse only if the technology is commercially viable or is shown to have a “reasonable probability” of commercial viability. Majority Op. at 38. Quite apart from the majority’s error in placing the burden on Princo to show probable commercial validity, the probable commercial viability test itself finds no support in the case law or antitrust policy, as the amicus brief for the FTC makes clear.²⁰ It has been explicitly rejected in antitrust cases²¹ and misuse cases as well. See, e.g., *Berlenbach*, 329 F.2d at 784. The reasons for this rejection are readily apparent. Apart from the joint venture rationale, there is, first, no procompetitive benefit from the suppression of potential competition, no matter

²⁰ En Banc Br. of Amicus Fed. Trade Comm’n 23 (“[H]ere Princo need not prove that a licensee attempting to develop new technology using the Lagadec methodology actually would have succeeded in creating a technically and commercially viable technology that could have competed successfully against Philips’ and Sony’s Orange Book standard. Such a ‘showing * * * is not an essential step in establishing that the [defendants]’ attempt to thwart its achievement * * * was an unreasonable restraint of trade.’” (quoting *Ind. Fed’n*, 476 U.S. at 461)).

²¹ See, e.g., *Standard Oil Co. (Cal.) v. United States*, 337 U.S. 293, 309–10 (1949) (rejecting proof of the restrictive effect of alleged unlawful practices on competition because “what would have happened but for the adoption of the practice that was in fact adopted . . . would be a standard of proof, if not virtually impossible to meet, at least most ill-suited for ascertainment by courts”); *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (en banc, per curiam) (“To require that [Sherman Act] liability turn on a plaintiff’s ability or inability to reconstruct the hypothetical marketplace absent a defendant’s anticompetitive conduct would only encourage monopolists to take more and earlier anticompetitive action.”).

how remote the possibility of success. As the majority purports to recognize, *see* Majority Op. at 37, the antitrust laws are designed to protect not only full-fledged competition but also nascent competition. It is vitally important to protect competition from being stifled in its infancy. There is great difficulty in predicting commercial viability in the early stages of technological development, and indeed the patent system itself recognizes the importance of protecting technologies that have not yet reached the stage of commercial viability. There are numerous examples of technology that in the early stages of development were thought likely to fail but which eventually matured into successful commercial applications, including the electric light bulb, telephone, radio, telegraph, and television.²² Moreover, even a flawed technology may provide competitive benefits. The Areeda and Hovenkamp treatise points out “the inquiry [into whether a given patent is superior or inferior] is rarely worthwhile, for even inferior technologies can provide some, even if not perfect, competition to the patentee.” 3 Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 707e, at 287 (3d ed. 2008). In short, it “would be inimical to the purpose of the Sherman Act to allow monopolists free reign to squash nascent, albeit unproven, competitors at will—particularly in industries marked by rapid technology advance and frequent paradigm shifts.” *Microsoft Corp.*, 253 F.3d at 79.

While it may be that proof by Philips that the Lagadec technology could never become commercially viable might be

²² Christopher Cerf & Victor S. Navasky, *The Experts Speak: The Definitive Compendium of Authoritative Misinformation* 225–27 (Villard Books 1998) (1994). For instance, in 1878 the British Parliamentary Committee concluded that Thomas Edison’s electric light bulb was “good enough for our transatlantic friends . . . but unworthy of the attention of practical or scientific men.” *Id.* at 225.

sufficient to defeat an antitrust violation, neither Philips' proof nor the ITC's findings reach that far. While Philips' witness suggested that commercial development of the Lagadec technology could be difficult, he did not testify that these difficulties could not be overcome. Indeed, the record appears to contain some evidence of Lagadec's potential. A 1986 Sony memorandum described the Lagadec proposal and indicated that potential solutions existed to some of the problems identified by Philips' expert. The Lagadec patent as issued reflected these solutions. *See, e.g.*, Lagadec patent col.6 ll.47–52, col.7 ll.54–58 (discussing band-limitation to eliminate disturbance at high and low frequencies). The ITC found only that the commercial viability of the Lagadec technology was “doubtful,” not that Philips had established that it could not be made commercially viable.

The majority's strict standard fails to provide adequate protection against the suppression of nascent technology, and allows patent holders free rein to prevent the development of potentially competitive technologies except in the most extreme and unlikely circumstances. I respectfully dissent.