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STANDARDS OWNERSHIP AND COMPETITION POLICYHerbert Hovenkamp¹**ABSTRACT**

Antitrust law is a blunt instrument for dealing with many claims of anticompetitive standard setting. Antitrust fact finders lack the sophistication to pass judgment on the substantive merits of a standard. In any event, antitrust is not a roving mandate to question bad standards. It requires an injury to *competition*, and whether the minimum conditions for competitive harm are present can often be determined without examining the substance of the standard itself.

When government involvement in standard setting is substantial antitrust challenges should generally be rejected. The petitioning process in a democratic system protects even bad legislative judgments from collateral attack. In any event, antitrust's purpose is to correct private markets. It is not a general corrective for political processes that have gone awry. The best case for antitrust liability occurs when the government has somehow been deceived into adopting a standard that it would not have adopted had it known the true facts. Even then, nonantitrust remedies such as equitable estoppel are probably a superior solution.

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Introduction

Antitrust's purpose is to protect competition, while giving firms reasonable freedom to innovate, develop, produce and distribute their products. While standard setting can enable firms to improve along all of these avenues of business progress, it can also facilitate both of antitrust's twin evils: collusion and exclusion. This essay explores some of the ways antitrust policy can evaluate claims that privately promulgated standards are anticompetitive without hindering socially beneficial conduct.

For antitrust purposes a standard is usefully defined as a set of technical specifications that provides a common design for some product or process.² While the focus of standard setting today is high technology industries with significant technological sophistication, the history of antitrust reaches back to standards that were less complex. The Supreme Court's first antitrust decision on the merits involved a joint running arrangement among railroads that included a significant standard setting component. The Supreme Court condemned the arrangement as nothing more than a cartel, ignoring the lower courts' conclusions that the agreement was intended primarily to coordinate schedules and standardize freight classifications, cargo transfer protocols, and the like.³

In some ways standards resemble intellectual property rights. Economically, the increased welfare that they produce is largely a consequence of product improvement, not of prices that are brought closer

2. See Herbert Hovenkamp, Mark D. Janis and Mark A. Lemley, *IP and Antitrust: an Analysis of Antitrust Principles Applied to Intellectual Property Law* §35.1a (2002 & 2006 Supp.). On antitrust and standard setting generally, see *id.*, Ch. 35. On standard setting more generally, see David J. Teece & Edward F. Sherry, *Standards Setting and Antitrust*, 87 *Minn. L.Rev.* 1913 (2003); Mark A. Lemley, *Intellectual Property Rights and Standard Setting Organizations*, 90 *Cal.L.Rev.* 1889 (2002); Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 *Cal. L. Rev.* 479, 551 (1998).

3. *United States v. Trans-Missouri Freight Ass'n.*, 58 *Fed.* 58, 79–80 (8th Cir.1893), reversed, 166 *U.S.* 290, 17 *S.Ct.* 540 (1897). See also Herbert Hovenkamp, *Regulatory Conflict in the Gilded Age: Federalism and the Railroad Problem*, 97 *Yale. L.J.* 1017, 1041 (1988). Even the setting track gauges in nineteenth century railroading promoted a standards battle. See Herbert Hovenkamp, *The Antitrust Enterprise: Principle and Execution* 284 (2006).

to marginal cost. As a result, some of the same antinomies exist between antitrust and standard setting as exist between antitrust and IP rights. Effective promulgation of standards may involve a certain amount of coordination of output by rivals and a certain amount of market exclusion -- both things that antitrust generally abhors. Further, the development of appropriate standards is often an R&D activity, characterized by up front costs and amortization over long time periods.

Standards also share one important characteristic with technology choices generally: they can become path dependent. Once a standard is adopted and technology designed around the standard, switching costs increase, making the exercise of durable market power possible. Standards are often subject to significant network effects. As a result, they acquire increased value per user as they are more widely adopted.⁴ This can facilitate the exercise of market power, because the standard's owners will be able to charge more for products compatible with the standard, or perhaps for access to the standard itself. Some but certainly not all standards are capable of conferring significant market power. In certain cases an "insider" with respect to some standard has a significant market advantage over outsiders, and thus may be in a position to set a price substantially above costs. This can happen if duplication of the standard is costly and compliance with it is essential for market success. For example, when compatibility with the standard is technologically essential, or if a government rule requires that a specific standard be followed, standards can have significant exclusionary power provided that they are difficult to appropriate. While IP rights do not inherently confer significant market power,⁵ some IP rights do, particularly if they control effective access to a market. The same thing is largely true of standards. Some are easily complied with, widely shared among a large group of firms, or unnecessary for successful competition in the market.⁶ Such standards are completely

4. For example, the model building code at issue in *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 494 (1988), was a standard with considerable exclusionary power because it was adopted almost verbatim by thousands of communities across the country.

5. See *Illinois Tool Works, Inc. ("ITW") v. Independent Ink, Inc.*, ___ S.Ct. ___, 2006 WL 468729 (March 1, 2006) (upsetting half century old antitrust presumption in the federal courts that a patent in a tying product gave its owner sufficient market power to make a tie unlawful).

6. See, e.g., *Foundation for Interior Design Education Research v. Savannah College of Art & Design*, 244 F.3d 521 (6th Cir. 2001) (privately promulgated accreditation standards for interior design schools not

consistent with robust competition. However, others are tightly controlled and effective access may be restricted to a small number of firms.⁷

Standards can also have some of the other consumption characteristics shared by IP rights. For example, an additional firm can adopt a standard without taking any production away from the standard's owner, other than the right to obtain royalties by licensing the standard. At the same time many standards are not licensed at all, but are given away in the sense that anyone who is willing to conform to them is invited into the relevant area of enterprise.⁸

The most likely economic effect of private standard setting is increased social value. By promulgating standards producers can increase both horizontal and vertical compatibility. "Horizontal" compatibility refers to compatibility as between competing goods that are subject to a standard. For example, a user can substitute one brand of compact disc, computer monitor, or shotgun shell for another in the same computer or shotgun. "Vertical" compatibility refers to the ability of goods to use the same inputs. For example, all Windows computers run the same software, or all automobiles burn the same gasoline. Standards can also reduce consumer search costs and increase consumer confidence, significantly reduce the costs of input suppliers, make networking possible or at least much more efficient, or facilitate the achievement of scale economies. As a result there

anticompetitive because there was no evidence that "accredited" schools had any market advantages over non-accredited ones); *George R. Whitten, Jr., Inc. v. Paddock Pool Builders, Inc.*, 508 F.2d 547, 558 (1st Cir.1974) (private standard setting for swimming pool heating and circulatory systems did not restrain trade because it appeared that most builders ignored the standard, which had no legal force).

7. E.g., *Union Oil Co.*, ___ F.T.C. ___, 5 CCH Trade Reg. Rep. ¶15618 (FTC, July 6, 2004) (patented standard for cleaner burning gasoline mandated by state law); *Rambus, Inc.*, 5 CCH Trade Reg. Rep. ¶15556 (FTC, Feb. 23, 2004) (patented standard for RAM chips).

8. See, e.g., *United States v. Realty Multi-List*, 629 F.2d 1351 (5th Cir. 1980); *Brown v. Indianapolis Board of Realtors*, 1977-1 Trade Cases ¶161,435 (S.D.Ind., 1977, unreported), both of which note the generally open standards for membership on real estate brokerage boards. Cf. *Visa U.S.A., Inc. v. SCFC ILC, Inc.*, 36 F.3d 958, 961 (10th Cir. 1994), cert. denied, 515 U.S. 1151 (1995) (Visa joint venture open to any institution that qualifies for FDIC insurance).

should be no antitrust presumption against standards, even those that are jointly set by competing firms.

Nevertheless, standards can also facilitate both of the evils that concern antitrust law -- namely, collusion and exclusion. When standards are created or enforced by competing producers collusion is possible. When they are used to keep some producers out of the market anticompetitive exclusion is possible.

Thus antitrust rules for standard setting will permit the great majority of standard setting activities to proceed. But they will also identify some instances where standards are used anticompetitively. Antitrust performs this function best by identifying clearly what the dangers are, specifying the conditions under which those dangers are likely to be realized, and then paying special attention to standard setting in situations that meet those conditions.

Importantly, if the standards in question are complex, the antitrust decision maker must avoid becoming overly involved in the substantive merits of the standard itself. Antitrust tribunals, particular juries, lack the technical skills to answer such questions as whether chiropractic is really a legitimate form of medical practice,⁹ whether a particular medical procedure is safe and effective,¹⁰ or whether a particular engineering standard is necessary for passenger limousines.¹¹ Well formulated antitrust rules should try to evaluate standard setting whenever possible by avoiding these difficult technological issues.

9. E.g., *Wilk v. American Med. Ass'n*, 895 F.2d 352 (7th Cir.), cert. denied, 496 U.S. 927 (1990) (condemning AMA standard setting rule that excluding chiropractors).

10. E.g., *Schachar v. American Academy of Ophthalmology, Inc.*, 870 F.2d 397 400 (7th Cir.1989) (radial keratotomy); *Hassan v. Spicer*, 2006 WL 228958 (E.D.N.Y., Jan 31, 2006) (nuclear cardiology).

11. See *Craftsmen Limousine, Inc. v. Ford Motor Co.* 363 F.3d 761 (8th Cir. 2004). See also *Eliason Corp. v. National Sanitation Foundation*, 614 F.2d 126, 139 (6th Cir.), cert. denied, 449 U.S. 826 (1980) (commercial refrigerators); *Consolidated Metal Prod., Inc. v. American Petroleum Institute*, 846 F.2d 284, 296 (5th Cir.1988) (oil well drilling heads); *Moore v. Boating Industry Ass'ns.*, 819 F.2d 693 (7th Cir.), cert. denied, 484 U.S. 854 (1987) (submersible boat trailer tail lights).

In the great majority of cases an antitrust tribunal can evaluate standards by looking, not at the substantive "reasonableness" of the standard itself, but at such issues as the number and identity of the persons making the standard, the exclusionary power that the standard generates, or other signs of the standard's potential to facilitate collusion or exclude rivals and facilitate the exercise of market power. This is not to say that antitrust can always avoid substantive evaluations of standards, but rather that it need do so in only a few situations.

The history of antitrust policy suggests that it has been unreasonably hostile toward private standard setting. Nonetheless, many of the early standard setting antitrust cases provoked legitimate competitive concerns, and some where nothing more than fronts for naked collusion.

Standards, Product Differentiation, and Collusion

One explanation for antitrust's traditional hostility toward joint standard setting is that many of the early cases involved obvious, often ham handed, attempts at price fixing. This seemed to create a mindset that found jointly set standards to be anticompetitive.

Standards facilitate collusion by minimizing product or service differentiation, or by making product specifications or terms readily observable across sellers. Cartels are much more difficult to manage when products are differentiated or sold subject to unique specifications. The fewer variables that cartel members must observe, the easier it is to stabilize a cartel equilibrium.¹² These observations generally apply to both "explicit" price fixing and to the more informal methods of collusion that we generally associate with oligopoly industries.

Antitrust history is fairly filled with attempts to facilitate collusion by standardizing products, terms of sale, delivery, or other components of a transaction. In *Standard Sanitary* a cartel of bathroom pottery manufacturers was led by a patentee who licensed its finishing process to other cartel

12. See F.M. Scherer & D. Ross, *Industrial Market Structure and Economic Performance* 279 (3d ed. 1990); Richard A. Posner, *Antitrust Law* 76-77 (2d ed. 2001); Herbert Hovenkamp, *The Antitrust Enterprise: Principle and Execution* 132 (2006). On oligopoly pricing under product differentiation, see W.K. Viscusi, J.M. Vernon, & J.E. Harrington, Jr., *Economics of Regulation and Antitrust* 108-112 (3d ed. 2000); Herbert Hovenkamp, *Federal Antitrust Policy: the Law of Competition and its Practice* §§4.1a, 4.2a, 4.4b (3d ed. 2005).

members. The cartel then designated goods that did not employ this process as "seconds" and required cartel members either to destroy them or ship them abroad in a fairly obvious attempt to reduce the output sold on the domestic market.¹³ In addition, the cartel fixed the price of all the goods that were designated first quality.

In the more famous *National Macaroni* case the defendants responded to a temporary shortage of durum semolina wheat by setting a product standard for pasta that called for 50% durum semolina and 50% inferior farina wheat.¹⁴ The standard was intended to suppress the price of durum semolina, and thus reduce the defendants' production costs.¹⁵

13. Standard Sanitary Mfg. Co. v. United States, 226 U.S. 20, 41 (1912). Cf. Milk & Ice Cream Can Inst. v. FTC, 152 F.2d 478, 482-483 (7th Cir. 1946) (noting testimony "that sales of 'firsts' as 'seconds' was a method of indirect price cutting.").

14. Nat. Macaroni Mfrs. Ass'n., 65 F.T.C. 583 (1964), enforced, 345 F.2d 421 (7th Cir. 1965).

The recent and troublesome decision in *Golden Bridge Technology, Inc. v. Nokia, Inc.*, ___ F.Supp.2d ___, 2006 WL 385222 (E.D.Tex. Feb. 17, 2006) falls closest to this category, at least in the eyes of the court. The plaintiff complained that it developed a patented technology for cellular phones which it wished to license to the cell phone companies. Acting through their standard setting organization, however, the cell phone companies adopted standards that excluded the technology and thus avoided the license fees. The court refused to dismiss a complaint that adoption of the standard amounted to a per se antitrust boycott. While a standard setting organization is free to adopt a lower cost standard, the effect of its adoption may be to prevent individual members from licensing the disapproved technology even if they wanted to. Nevertheless, antitrust's per se rule is reserved for practices that are so clearly anticompetitive that detailed inquiry into the market structure or the effects of the practice are unnecessary. This hardly seems like such a case. The court analogized to *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 494 (1988), discussed *infra*. But in *Allied Tube* the plaintiff was not asking other manufacturers in the organization to license its technology, it simply wanted market approval side-by-side with other products.

15. Contrast Tag Mfrs. Inst. v. FTC, 174 F.2d 452, 461-462 (1st Cir. 1949), which refused to condemn a trade association's rules that both standardized the format and design of shipping tags and required detailed reporting concerning prices. The FTC had argued that the product standardization

Similarly the *C-O-Two* decision seems to have involved nothing more than a naked cartel accomplished by turning a product differentiated industry into a completely standardized one.¹⁶ The defendants made fire extinguishers that were publicly bid to government purchasers such as schools. They agreed on product specifications that were so detailed that the extinguishers could not be differentiated from one another except by the manufacturer's identification tag.¹⁷ In condemning the restraint the court found, first, that it facilitated price fixing, and second, that the standards were completely unnecessary to the safe and effective operation of the fire extinguishers. Notwithstanding the obvious advantages of standardized container sizes, the court reached the same conclusion in the *Milk Institute* case, which involved agreements that standardized the sizes of milk containers when the agreements were being used to facilitate price fixing.¹⁸

Several antitrust cases also involve standardization of terms of sale

made price collusion much easier; the court replied:

Nor is the conclusion of the Commission strengthened by its finding that the administration of the reporting agreements "was materially assisted by the standardization of the component parts of tags and tag products developed and adopted under the auspices of the respondent Institute." ... These standardizations are deemed to be to the advantage of all concerned, including the consumer who, among other benefits, is thereby better enabled to know what he is buying and to make intelligent price comparisons. Of course, the detailed standardization of tags and components which the Institute has assisted in developing tends to make more serviceable the information reported ... under the Tag Industry Agreement and ... collated and disseminated among the Subscribers. But if the reporting agreement is otherwise lawful, such enhanced usefulness of the agreement as results from standardization would hardly infect it with illegality.

16. *C-O-Two Fire Equip. Co. v. United States*, 197 F.2d 489 (9th Cir.), cert. denied, 344 U.S. 892 (1952). See also *United States v. Am. Radiator & Standard Sanitary Corp.*, 433 F.2d 174, 185 (3d Cir. 1970), cert. denied, 401 U.S. 948 (1971) (condemning standard setting agreement on household radiators that effectively eliminated lower price, lower quality products).

17. *Id.* at 493.

18. *Milk & Ice Cream Can Inst. v. FTC*, 152 F.2d 478, 482 (7th Cir. 1946).

and delivery. For example, in *Catalano* the Supreme Court condemned an agreement that standardized credit terms for the wholesaling of beer to retailers.¹⁹ The courts have routinely condemned "basing point" pricing and related agreements among sellers to standardize delivery terms.²⁰ And in the famous 1936 *Sugar Institute* case the Supreme Court condemned an agreement among sugar manufacturers to issue standardized price lists for sugar and then to adhere to the lists while they were in force.²¹

To be sure, the pricing mechanism itself can be improved by standard setting. Standardized price terms can reduce consumer search costs and minimize fraud or misrepresentation. Here, antitrust has taken the administratively defensible position that for most pricing standards the risks of collusion are simply too high in relation to the gains. As a result, promulgation of standards concerning pricing should come from the government.²² Indeed, even here some of the most anticompetitive of statutory regimes are those that regulate such things as the posting of retail liquor or wine prices, effectively permitting sellers to collude.²³

19. *Catalano, Inc. v. Target Sales, Inc.*, 446 U.S. 643 (1980). See 12 Herbert Hovenkamp, *Antitrust Law* ¶2022 (2d ed. 2004).

20. E.g., *FTC v. A. E. Staley Mfg. Co.*, 324 U.S. 746 (1945) (condemning an agreed upon basing-point pricing system for the sale of glucose); *Corn Prods. Ref. Co. v. FTC*, 324 U.S. 726 (1945) (similar). See also *FTC v. Cement Inst.*, 333 U.S. 683, 696-700 (1948) (condemning agreement to employ basing point pricing; noting its tendency to lead to complete uniformity of pricing, particularly when the product at issue is fungible); *Clamp-All Corp. v. Cast Iron Soil Pipe Inst.*, 851 F.2d 478, 484-485 (1st Cir. 1988), cert denied, 488 U.S. 1007 (1989) (Breyer, J.). On the economics, see George J. Stigler, *A Theory of Delivered Price Systems*, 39 *Am. Econ. Rev.* 1143 (Aug. 1949); Frederic M. Scherer & David Ross, *Industrial Market Structure and Economic Performance* 505-506 (3d ed. 1990); Dennis W. Carlton, *A Reexamination of Delivered Pricing Systems*, 26 *J.L. & Econ.* 51 (1983); David Haddock, *Basing-Point Pricing: Competitive v. Collusive Theories*, 72 *Am. Econ. Rev.* 289 (1982).

21. *Sugar Institute, Inc. v. United States*, 297 U.S. 553 (1936).

22. A notable exception is *Cal. Dental Ass'n v. FTC (CDA)*, 526 U.S. 756 (1999) (advertising rules of dental association effectively ban most price advertising and all quality advertising).

23. E.g., *324 Liquor Corp. v. Duffy*, 479 U.S. 335 (1987); *TFWS v. Schaefer*, 242 F.3d 198 (4th Cir. 2001).

A few of these decisions, such as *Milk Institute*, undoubtedly reached too far. But most probably did not. Further, they carry a fairly important message: product differentiation is still an important value, primarily because consumers have different preferences but also because it makes collusion more difficult to sustain. Standards that do no more than reduce product differentiation in order to facilitate price matching do not provide a social benefit.

The values of product differentiation probably do not extend to the sizes of milk containers, however. And school children might be safer if all fire extinguishers work exactly the same way so that teachers can reliably be trained one time for all of them. So antitrust must tread carefully even when it is attacking standard setting that might facilitate collusion. If standard setting is accompanied by price fixing, as it very likely was in the *C-O-Two* and *Milk Institute* decisions, then the antitrust tribunal can always respond by condemning the price-fixing. But most cases are more difficult and involve situations where standardization facilitates express or tacit collusion but the collusion itself is evidenced only by parallel prices. In that case antitrust fact finders must look at other factors. For example, do consumers benefit from the standard setting? Do the standards create the kind of product homogeneity that facilitates collusion, or do they merely regulate safety or functionality in ways that permit significant product differentiation along other avenues? It is also important to determine whether non-producer interests have a significant role in the standard setting. For example, while fire extinguisher producers have an interest in colluding on the price of fire extinguishers, fire insurance companies do not; they are benefitted by fire extinguishers that work as well as possible and are sold competitively.

Finally, the number of firms in the market is often important. Cartels become much more difficult to manage as the number of significant firms in a market rises above a dozen or so. Informal cartels, or those relying on tacit rather than express collusion, may require even fewer. While a large number of participants is an indicator that collusion is less likely, however, in some cases collusive output reductions and higher prices are quite possible even though the market has numerous competitors. This can happen when the standard in question is itself a direct restraint on output or pricing and violation of the standard is readily observable by other cartel members. For example, even though the NCAA has several hundred members its rule limiting nationally televised football games served to reduce output anticompetitively.²⁴ No member could surreptitiously cheat on the cartel by

24. *NCAA v. Bd. of Regents of Univ. of Oklahoma*, 468 U.S. 85 (1984). At the time of the litigation the NCAA had 850 members. *Id.* at 89.

secretly televising a football game. Accordingly, the number of nationally televised games increased significantly and TV advertising rates fell after the rule was lifted.²⁵ In sum, a large number of firms in the market subject to standard setting is often relevant but need not be decisive. One must always consider how the collusive restraint on output or price is being carried out.

Exclusion and Standard Setting

Before firms can charge monopoly prices they must be able to do two things. The first is to coordinate the output and pricing decisions of existing producers. The difficulty of accomplishing this ranges from nil in the case of the monopolist, which absolutely controls its own price and output, to quite severe if the market has a large number of firms, and particularly if the firms use different technologies or produce differentiated products.

But firms bent on monopoly must also keep the output of others out of the market. Standard setting can accomplish this by setting standards in such a fashion that only a small number of compliant firms meet the standard, or the standard is licensed to only such firms.

At the same time, if a standard setting process is at all meaningful one or more firms will either "flunk" the standard or else have to make a significant investment in order to comply with it. The most common antitrust claim involving standard-setting is that it is used to limit competition by excluding rivals, whether it be restrictive bar passage rates,²⁶ hospital accreditation standards that exclude chiropractors,²⁷ surgical standards that

25. Accord *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679 (1978) (69,000 members, of whom 12,000 were active consulting engineers affected by the challenged canon against competitive bidding).

26. *Hoover v. Ronwin*, 466 U.S. 558 (1984) (bar exam grading standards were promulgated by state supreme court and qualified for antitrust "state action" immunity); *Mothershed v. Justices of the Supreme Court (Arizona)*, 410 F.3d 602 (9th Cir. 2005) (similar).

27. *Wilk v. American Med. Ass'n*, 895 F.2d 352 (7th Cir.), cert. denied, 496 U.S. 927 (1990) (condemning AMA rule excluding chiropractors from access to important inputs such as hospital X-ray facilities). See also *Hahn v. Oregon Physicians' Serv.*, 868 F.2d 1022, 1028-1029 (9th Cir. 1988), cert. denied, 493 U.S. 846 (1989) (exclusion of podiatrists); *Schachar v. American Academy of Ophthalmology, Inc.*, 870 F.2d 397 400 (7th Cir.1989) (standards for eye surgery that allegedly discriminated against radial keratotomy). And see *Mass. School of Law at Andover, Inc. v. ABA*, 107

protect against cost cutting medical procedures,²⁸ or building code or product safety standards that protect incumbent firms from threatening technologies.²⁹ Network standards might keep some firms off the network, perhaps imposing prohibitive costs on them in the process. Closely related is the proprietary standard protected by intellectual property rights, whose licensing costs imposed on rivals create a price umbrella protecting the IP holders. Sometimes these standards are created or made enforceable with the help of the government, thus implicating antitrust's *Noerr-Pennington* doctrine, which gives a measure of quasi-constitutional protection to petitions to the government for anticompetitive actions.³⁰ Sometimes they are created by private bodies which have a significant influence over government decision-making.³¹

To repeat an earlier warning: Antitrust is often way outside its competence if it attempts to evaluate standard setting by examining the technological merits of the challenged standard. Although antitrust contains

F.3d 1026, 1032, 1037 (3d Cir.), cert. denied, 522 U.S. 907 (1997) (law school accreditation standards that, in part, linked accreditation to professor salaries); *United States v. ABA*, 60 Fed. Reg. 39,421 (1995) (consent decree limiting ABA's ability to tie law school accreditation to faculty compensation).

28. *Summit Health, Ltd. v. Pinhas*, 500 U.S. 322, 341 (1991) (physician allegedly denied staff privileges because he had developed lower cost procedure for conducting eye surgery that required only one surgeon instead of two).

29. *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988) (defendant's manipulated standard setting organization in order to disapprove plaintiff's plastic electrical conduit in order to protect market for traditional steel conduit); *Hydrolevel Corp. v. American Society of Mechanical Engineers, Inc.*, 456 U.S. 556 (1982) (officer of society of mechanical engineers participated in fraudulent scheme to discredit plaintiff's valve); *Consolidated Metal Products, Inc. v. American Petroleum Institute*, 846 F.2d 284 (5th Cir. 1988) (institute made up of manufacturers and users of oil well equipment refused to approve plaintiff's allegedly innovative and lower cost design).

30. E.g., *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 494 (1988); *Union Oil Co.*, ___ F.T.C. ___, 5 CCH Trade Reg. Rep. ¶15618 (FTC, July 6, 2004) (patented status for cleaner burning gasoline).

31. E.g., *Allied Tube*, *supra*; *Hydrolevel*, *supra*.

a rule of reason, "reasonableness" in this context refers to the impact of a standard on competition, not to the substantive reasonableness of the standard itself. In most private antitrust cases the plaintiff seeks damages, and as a result most of them contemplate a jury trial. Except in clear cases of abuse, juries are not up to answering technical questions concerning the necessity or appropriateness of a particular standard.

Concerted Standard Making and Exclusion

The antitrust problem of concerted standard setting that excludes rivals is a half century old, including the 1943 *AMA* case which condemned the AMA for adopting an "ethical" standard that forbade physicians from working for prepaid health organizations.³² The grandparent of explicit product safety standards cases is the 1961 *Radiant Burner* decision, in which the Supreme Court sustained the complaint of a gas heater manufacturer alleging that it was excluded from the market by an industry safety standard that had been biased and capriciously enforced.³³

Radiant Burners suggested that one should evaluate standards by looking at the intent of those setting them. But there are better ways for courts to proceed, and *Radiant Burners* itself suggests some of them. The defendants in that case included not only competing manufacturers of gas heaters, but also natural gas utilities and pipeline companies. One can easily see why a competing heater manufacturer would wish to exclude a cheaper or more efficient burner, or simply remove rivals from the market generally. But natural gas utilities and gas pipeline companies sell a complementary

32. *AMA v. United States*, 317 U.S. 519, 532-533 (1943).

33. *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1961) (reversing lower courts' dismissal on pleadings). Cf. *Carleton v. Vermont Dairy Herd Improvement Ass'n., Inc.*, 782 F. Supp. 926, 934 (D. Vt. 1991) (plaintiff's claim that market dominating milk testing organization disapproved his milk without subjecting it to a fair test stated claim under rule of reason); *McCreery Angus Farms v. American Angus Ass'n*, 379 F. Supp. 1008, 1018 (S.D. Ill.), *aff'd mem.*, 506 F.2d 1404 (7th Cir. 1974) (granting preliminary injunction against enforcement of plaintiff's suspension resulting from dispute over blood typing; emphasizing denial of due process or any effective right to challenge association decision making or even obtain a clear statement of the problem). Contrast *Eliason Corp. v. Nat. Sanitation Found.*, 614 F.2d 126 (6th Cir.), *cert. denied*, 449 U.S. 826 (1980) (approving standard setting program that did not attempt to exclude disapproved products from the market or test them in a discriminatory fashion).

product and would have not ordinarily have any incentive to keep a safe, efficient heater off the market. Indeed, they might share liability for fires caused by unsafe heaters. Further, while control of the natural gas industry by a burner maker or even a cartel of them is possible, it is quite unlikely and almost certain to be apparent to a fact finder.

This suggests that an early inquiry in challenges to exclusionary standard setting should be structural, asking whether the defendants (or a controlling number of them) are likely to have anticompetitive incentives. The Seventh Circuit's *Moore* decision suggests the proper approach. The plaintiff made a submersible tail light for boat trailers, which was excluded by an association of boat trailer manufacturers because of a tendency to short out.³⁴ The court found no antitrust violation, observing that the plaintiff tail light manufacturer did not compete with the trailer makers who controlled the association, and that trailer manufacturers would have no incentive to place an anticompetitive restraint on tail light manufacturers. They wished only to purchase safe tail lights that complied with federal specifications.³⁵

As with standard setting intended to facilitate collusion, the number of players can be relevant. If the firms in a market are so numerous that collusion is impossible then they may have little incentive to exclude another

34. *Moore v. Boating Industry Ass'ns.*, 819 F.2d 693 (7th Cir.), cert. denied, 484 U.S. 854 (1987).

35. *Id.* at 699:

Manufacturers of boat trailers, some of which are members of TMA, are customers for trailer lamps. The trailer manufacturers do not make lamps. There is no competition between lamp and trailer manufacturers. The latter are the customers of the former.... It would seem to make no difference to a trailer manufacturer from whom he bought lamps, so long as they complied with federal safety standards and thus did not expose the trailer manufacturer to federal penalties of fines and recalls.

See also *M & H Tire Co., Inc. v. Hoosier Racing Tire Corp.*, 733 F.2d 973, 980 (1st Cir. 1984) (track owners excluding plaintiff had no financial interest in tire production); *Jessup v. AKC, Inc.*, 61 F.Supp.2d 5, 6 (S.D.N.Y. 1999), *aff'd mem.*, 210 F.3d 111 (2d Cir. 2000), cert. denied, 531 U.S. 1072 (2001) (rejecting antitrust challenge to breed standards; AKC "does not compete or engage in the breeding, selling or showing of" Labrador Retrievers).

firm. However, even firms who are behaving competitively vis-a-vis one another have an incentive to exclude lower cost or superior technologies from the market, particularly if they themselves cannot readily obtain access to the technology. Even if the slide rule market contains 100 firms who compete aggressively on price and slide rule design, these firms still have an incentive to keep electronic calculators off the market if they believe that the calculators constitute a major competitive threat to the demand for slide rules. For example, the standard setting organization in the *Allied Tube* case contained several thousand members.³⁶ In that case a manufacturer of steel electric conduit, fearing that the plaintiff's plastic conduit was both cheaper and superior, organized a cartel that manipulated the standard setting process so as to disapprove the plastic conduit. In this case the numerosity of the membership did not mitigate competitive concerns because the concern was not price fixing but rather the removal of a threatening, superior product from the market. Someone who wanted to cheat on the cartel could not surreptitiously flood the market with the excluded product.

Standard Making and Unilateral Acts by Dominant Firms

In markets where interfirm compatibility is valuable dominant firms (or dominant cartels or coalitions) typically profit by maintaining incompatibility with rivals. By maintaining incompatibility a dominant firm protects itself from new entry or raises the costs of its rivals -- thus, for example, Microsoft's efforts to ensure that the Windows operating system would not become compatible with rival operating systems or that new rival systems be permitted to emerge.³⁷ By contrast, survival or growth for a nondominant firm may require it to become compatible with the dominant firm's technology.³⁸

36. *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 494 (1988). According to its website the National Fire Protection Association, or NFPA, has 79,000 members today. See *NFPA.org*. The number involved in the vote to disapprove plastic conduit was 784, and the conduit was disapproved by a vote of 394 to 390. See 486 U.S. at 497.

37. See, e.g., *United States v. Microsoft Corp.*, 87 F.Supp.2d 30, 44 (D.D.C. 2000) (conclusions of law), *aff'd in part, rev'd in part*, 253 F.3d 34 (D.C. Cir. 2001), *cert. denied*, 534 U.S. 952 (2001) (speaking of Microsoft's efforts to prevent Sun Microsystems's Java from becoming a medium that would make rival operating systems more compatible with Microsoft Windows).

38. See 3A Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶1776 (2d ed. 2002).

Exceptions exist to both of these rules. First, a dominant firm may decide to open its architecture, believing it can earn more from marketwide acceptance and licensing. IBM made this decision with respect to the personal computer architecture in the early 1980s. Second, even a nondominant firm, such as Apple computer, might wish to preserve incompatibility in a product differentiated market if it occupies a profitable market niche.

In monopolized markets "standard setting" often refers to nothing more than the dominant firm's selection of a standard, which other firms are largely obliged to accept or else be relegated to small niches. For example, once Kodak, a film monopolist, selects a format for its Instamatic, cartridge-loading camera-and-film system, rival camera makers such as Berkey Photo may have very little choice but to design a compatible camera.³⁹

Should a dominant firm's unilateral selection of a standard be grounds for antitrust liability when the *de facto* result is that the selected standard becomes the market standard, perhaps raising the costs of rivals or in extreme cases excluding them altogether? Antitrust does not condemn "no fault" monopolization. About the closest we have ever come is an "essential facility" doctrine that may force a firm to share a technology that is essential for market access. The Supreme Court's 2004 *Trinko* decision leaves few opportunities for use of that doctrine.⁴⁰ A corollary would seem to be that a firm selecting a technology for its own products has no duty to protect its rivals' market by ensuring the compatibility of their competing or complementary products.

The essential facility doctrine speaks of the terms under which a firm may be required to share an existing technology. However, the intentional selection of a technology that excludes rivals is a more aggressive act. One might say that, while a firm has no duty to share its resources or inputs, it

39. Berkey Photo v. Eastman Kodak Co., 603 F.2d 263, 287 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980) (rejecting claim that Kodak had an antitrust obligation to "pre-disclose" its design so that rivals could invent around it and have copies ready by the time the product was introduced). Accord California Computer Prods. v. IBM (CalComp), 613 F.2d 727 (9th Cir. 1979) (IBM's design of personal computer with integrated components forced rivals to adopt the same technology).

40. Verizon Communic., Inc. v. Law Offices of Curtis Trinko, LLP, 540 U.S. 398 (2004).

does have an obligation not to adopt a standard that excludes rivals unnecessarily. But antitrust tribunals cannot be in the business of making technology choices for firms. Further, product complementarity is a common feature of technologically sophisticated products, and incompatibility is often a consequence of technological success. If Kodak's Instamatic film system had been a flop, a rival camera maker would be unlikely to complain about its inability to produce complementary products.⁴¹

Another reason for deferring to the technology choice of the dominant firm is that typically the old technology remains available. In that case consumers are not injured by the dominant firm's innovation because they can still purchase the older product; they simply fail to obtain the full benefit of competition in the new technology. To be sure, this is not necessarily the case. Kodak might simultaneously introduce its Instamatic film system and withdraw from the older film format, thus forcing all consumers to the new technology. But it is difficult to claim that consumers are injured by a new, monopolized technology when the existing technology remains fully in place. About all we can say is that consumers lose the ability to migrate to the new technology at the competitive price.

One might rationally conclude that a completely unilateral technology choice that becomes an industry standard should *never* be the basis for an antitrust claim, no matter how much damage the technology choice does to rivals. Among the range of positions that one could take on this issue, I believe this would be better than any position that required juries to make substantive technological judgments (except in very clear cases) or that tried to discern the defendant's intent. It would clearly be better than any rule that required court's to make substantive *ex post* assessments about the consumer benefits that result from a particular technological choice. Innovation always occurs under great uncertainty, and not every successfully marketed innovation is a clear winner for consumer welfare.

However, a rule of complete nonliability probably goes too far. Situations exist where firms set out to re-design products for no other purpose (objectively measured) than to make rival technologies incompatible. The *C.R. Bard* case in the Federal Circuit may have been such a situation.⁴² The defendant was the dominant manufacturer of a patented biopsy gun used for taking skin samples. The gun itself was

41. See *Berkey Photo*, *supra*.

42. *C.R. Bard v. M3 Systems*, 157 F.3d 1340 (Fed.Cir. 1998), cert. denied, 526 U.S. 1130 (1999).

durable but used disposable needles that captured and enclosed tiny pieces of human skin, which could then be sent to the laboratory. The needles had been unpatented and were made by numerous manufacturers, subject only to the requirement that their connection end be structurally compatible with the collar on the gun. The defendant then redesigned the collar and developed a new patented needle⁴³ that was the only one compatible with the gun. The jury rejected the defendant's argument that the re-designed gun collar and needle were a technological improvement.⁴⁴

Assuming the strongest case -- namely, that the dominant firm intentionally re-designed its dominant product in such a way that it was not an improvement at all, but simply moved complementary products from a competitive to a monopolized environment -- one might wish to preserve some basis for antitrust liability. Of course, one still needs to ask how a dominant firm can "monopolize" by making a complementary product incompatible with that of rivals. The so-called "leverage" theory of tying arrangements, which was that tying of monopolized and competitive products turned one monopoly into two, was discredited in the literature a half century ago.⁴⁵ Kodak or Bard can earn all the monopoly profits available in their markets by setting a monopoly price for the camera or biopsy gun. They cannot make a larger monopoly profit simply by monopolizing the complementary product as well.

One reason a firm in Kodak's or C.R. Bard's position might try to create incompatibility in complementary products is to further price discrimination. If the value that users place on the biopsy gun is a function of how often they use it, then Bard can charge a higher price for needles and earn greater returns from high intensity users than from low intensity users. Price discrimination itself is not a good reason for condemning such a practice, because its welfare consequences are so indeterminant. Such a price discrimination scheme is likely to increase rather than reduce the output of biopsy guns, thus making it a poor candidate for a claim of monopolization.⁴⁶ Further, the profitability of even inefficient price

43. Actually, the new patent was a combination patent covering the gun plus the needle. See *id.*, 157 F.3d at 1347.

44. *C.R. Bard*, 157 F.3d at 1382.

45. Ward Bowman, *Tying Arrangements and the Leverage Problem*, 67 *Yale L.J.* 19 (1957). See Herbert Hovenkamp, *Federal Antitrust Policy*, note 12 at §10.6a.

46. For example, under the older technology Bard would charge everyone

discrimination schemes does not necessarily depend on the exclusion of a rival. Section 2 of the Sherman Act is not a mandate to the courts to condemn economically efficient practices, but only those practices that are unreasonably exclusionary.

But there are other explanations. For example, viable competition in the market for the complementary product may provide the platform for entry into the market for the primary product. Or alternatively, innovation by rivals in the complementary product may increase the likelihood that alternative technologies will emerge. For example, the concern in *Microsoft* was not that Microsoft wanted to exclude Netscape in order to charge higher prices for either Windows or Internet Explorer. Rather, it was that a viable Netscape complemented with Java would increase the compatibility between Windows and rival operating systems, or else facilitate the emergence of rival platforms.⁴⁷ If that should happen Microsoft might be relegated to one among many players in a product differentiated operating system market. As is so often the case in antitrust, such concerns are highly specific to the industry. As a result, one hesitates to adopt overly categorical rules in either direction.

Another issue concerns the firm that participates in a standard setting process while withholding information about IP rights that it has or is in the process of perfecting. While the facts vary, in the typical case the firm waits until the standard has been adopted and then surprises participants by asserting the IP right and demanding royalties from those that cannot comply with the standard without infringement.

Antitrust remedies for unilateral conduct are appropriate only for monopolization. This does not mean that antitrust should never intervene when such abuses occur, but it must stick to its insistence on power and anticompetitive effects. At the other extreme, it is incorrect to conclude that antitrust does not apply because under the antitrust laws a firm is free to

the profit-maximizing price for the gun because it has no control over the needles, which are sold in a competitive market. Under the new scheme it might charge less than the monopoly price for the gun, or even give it away, but place all or part of the overcharge in the needles. As a result, low intensity users unwilling to pay the old monopoly price will be able to purchase the gun, and of course Bard will earn even more from high intensity users who consumer a large number of needles. See Hovenkamp, *Federal Antitrust Policy*, note 12 at §10.6e.

47. See Hovenkamp, *Antitrust Enterprise*, note 3 at 292-298.

refuse to license its patents.⁴⁸ That position confuses two issues. One is the fact that a "mere" refusal to license is not an antitrust violation.⁴⁹ The other is that compulsory licensing of patents is a common remedy for conduct that has been found to violate the antitrust laws.⁵⁰

Nevertheless a misrepresentation rises to the level of an antitrust violation only when it permits the offender to dominate a market, or creates a dangerous probability that this will occur. Or to say it differently, the misrepresentation satisfies the conduct component of the offense of monopolization or attempt to monopolize, but the structural component of the offense must also be proven, as well as causation.⁵¹ Proving structure may require a showing that the standard dominates a relevant market, and also that the patent is either necessary for meeting the standard or that the costs of meeting it without infringing the patent are higher.

As a result, doctrines derived from the patent laws, such as equitable estoppel, or even contract law are generally more appropriate for addressing such holdup problems.⁵² Most importantly, standard setting processes must

48. See, e.g., *Townshend v. Rockwell Intl. Corp.*, 2000 WL 433505, 2000-1 Trade Cas. ¶72890, 55 U.S.P.Q.2d 1011 (N.D.Cal. March 28, 2000) (reasoning from premise that the antitrust laws do not impose a duty to license to conclusion that alleged fraudulent misrepresentation before a standard setting body did not violate the antitrust laws when the requested remedy involved compelled licensing).

49. See Hovenkamp, Janis & Lemley, note 2, Ch. 13. Compulsory licensing is a rarity in patent law, although there are some exceptions. For example, an unused 1970 amendment in the Clean Air Act, 42 U.S.C. §7608, provides that the Attorney General can seek judicially supervised compulsory licensing of patented technology necessary to achieve clean air standards, where such licensing might be needed to avoid giving the patentee a monopoly.

50. Contrast ¶709 and ¶710 in 3 Phillip E. Areeda & Herbert Hovenkamp *Antitrust Law* (2d ed. 2002).

51. See Hovenkamp, et al, *IP and Antitrust*, §35.5b.

52. See *Rambus Inc. v. Infineon Technologies Ag*, 318 F.3d 1081 (Fed. Cir. 2003), cert. denied, 540 U.S. 874 (2003) (refusing to find a duty to disclose under state common law of fraud; also finding that standard could be met without infringing Rambus' patent claims); *Wang Labs v. Mitsubishi Elecs.*, 103 F.3d 157 (Fed. Cir. 1997), cert. denied, 522 U.S. 818 (1997) (patentee

be defined in such a way as to give firms incentives to disclose their IP claims and place a price on them in advance of adoption, after which the exercise of market power is typically far more likely.⁵³ Failures are probably best addressed via the institutional design of standard setting procedures, including predisclosure obligations, rather than by antitrust.

Government Involvement in Anticompetitive Standard Setting

Federal and state governments are the largest standard setters in the economy. The vast majority of these standards are readily available for private appropriation and completely consistent with competition. For example, government agencies might define a standard for grade A milk or prime beef, bar passage and licensing of attorneys, or safety of electrical components. Any firm or person who can comply with the standards may lawfully sell in the market.⁵⁴

equitably estopped from asserting a patent when it had encouraged others to adopt a standard containing the patent); accord *Stambler v. Diebold*, 1988 WL 95479, 11 U.S.P.Q.2d 1709 (E.D.N.Y. 1988), *aff'd mem.*, 878 F.2d 1445 (Fed. Cir. 1989) (patentee who knew it had patent covering standard adopted in procedure in which it participated, and who kept silent, later equitably estopped from enforcing the patent); *Symbol Technologies, Inc. v. Proxim Inc.*, 2004 WL 1770290 (D.Del. Jul 28, 2004) (refusing to assert equitable estoppel where patentee did not mislead other participant in standard setting process about the existence of its patents). See also *re Dell Computer Corp.*, No. 93-10097 (F.T.C. 1995) (consent decree under which Dell agreed not to assert IP rights when it had represented in standard-setting process that it in fact had no such rights). Cf. *re Rambus, Inc.*, FTC No. 9302 (Feb. 24, 2004), an initial decision in which the administrative law judge held that a firm could withhold information about pending patent applications even when the standard setting process in which it was participating required disclosure. These issues are thoroughly explored in Hovenkamp, Janis & Lemley, note 2, at §35.5b. See also Mark A. Lemley, *Intellectual Property Rights and Standard Setting Organizations*, 90 Cal.L.Rev. 1889 (2002).

53. See Daniel G. Swanson and William J. Baumol, *Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection and Control of Market Power*, 73 *Antitrust L.J.* 1 (2005).

54. For example, the standards for electrical components at issue in *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 494 (1988), were placed in local government building codes.

Claims that direct government involvement in private standard setting is anticompetitive typically arise in one of two ways. In the first, some governmental or quasi-governmental entity adopts a standard put forward by private firms and claimed by rivals to be anticompetitive. Such an action can implicate the *Noerr-Pennington* doctrine, which declares that qualifying petitions to the government cannot be antitrust violations, even if the intent or effect of the requested action is anticompetitive. For example, in the *Columbia* case the city of Columbia, South Carolina, adopted a land use standard regulating the size and spacing of billboard signs that favored the signs of a politically favored business firm and excluding those of a rival.⁵⁵ The Supreme Court applied the historical *Noerr* rule that private parties have a right, essentially protected by the First Amendment, to petition the government for even anticompetitive actions. Rivals cannot use antitrust suits to challenge the legislation or executive action that results. Indeed, the *Noerr* case itself was about a standard-setting campaign by railroads to induce the Commonwealth of Pennsylvania to impose cost-increasing standards on truckers, which were competing with the railroads for freight business.⁵⁶ The history of regulation is fairly filled with the efforts of this or that interest group to impose restrictive standards on rivals that either increase the rivals' costs or remove their competition from the market altogether.⁵⁷

Significantly, *Noerr* protects the petitioning process by which anticompetitive government regulation is made. However, it does not protect the marketplace results of that process. For example, if a group of businesses petition a legislature for a statute that gives them the authority to

55. *City of Columbia v. Omni Outdoor Advertising, Inc.*, 499 U.S. 365 (1991).

56. *Eastern Railroad Presidents Conference v. Noerr Motor Freight, Inc.*, 365 U.S. 127, 130 (1961).

57. E.g., *Cogeneration, Inc. v. Florida Power & Light Co.*, 76 F.3d 1560 (11th Cir.), modified on reh'g., 86 F.3d 1028 (11th Cir. 1996) (government restrictions on power co-generation); *Christian Memorial Cultural Center v. Michigan Funeral Directors Assn.*, 998 F.Supp. 772 (E.D.Mi. 1998) (regulations directed at discount funeral services); *Certification in Occupational Therapy, Inc. v. American Occupational Therapy Assn.*, 24 F.Supp.2d 494 (D. Md. 1998) (legislative adoption of licensing restrictions on occupational therapists). See 1 Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶¶201-204 (3d ed. 2006).

exclude competition by setting standards *Noerr* would protect their right to obtain this legislation. However, under the antitrust "state action" doctrine private conduct approved by that statute could still be challenged unless it was "actively supervised" by a public official or agency.⁵⁸ The same thing generally applies to federal regulatory standards: private standard setting promulgated under such regimes is not immunized from the antitrust laws unless the relevant federal agency exercises sufficient oversight over the conduct.⁵⁹

Finally, *Noerr* may not protect a firm that gives false information which distorts the process by which a government standard is created or applied.⁶⁰

The previously discussed standards holdup problem can implicate *Noerr* when the standard maker is the government. For example, in *Unocal* a firm allegedly proposed standards for low emission fuel to a state air quality agency while surreptitiously perfecting patent claims that covered those very

58. Patrick v. Burget, 486 U.S. 94 (1988) (physician discipline by peers; inadequate state supervision); Pinhas v. Summit Health, Ltd., 894 F.2d 1024, 1030 (9th Cir. 1989), aff'd on other grounds, 500 U.S. 322 (1991) (private standard setting for surgical procedures; inadequate supervision); Jiricko v. Coffeyville Memorial Hosp. Medical Center, 700 F. Supp. 1559 (D. Kan. 1988) (similar; peer review). Cf. Health Care Equalization Comm. v. Iowa Medical Socy., 851 F.2d 1020, 1027 (8th Cir. 1988) (immunizing exclusion of chiropractors from insurance coverage pursuant to medical society accreditation decision; state official supervised the process); Earles v. State Bd. of Certified Public Accountants of Louisiana, 139 F.3d 1033 (5th Cir.), cert. denied, 525 U.S. 982 (1998) (state board setting accountancy standards is "state itself" and needs no supervision).

59. E.g., Silver v. New York Stock Exch., 373 U.S. 341, 357 (1963) (unsupervised discipline by NYSE, a private group). See also MCI Communic. Corp. v. AT&T Co., 708 F.2d 1081, 1102 (7th Cir.), cert. denied, 464 U.S. 891 (1983) (AT&T's unilateral setting of standards for interconnection by competing carriers not immunized when it was not sufficiently supervised by regulatory agency); Litton Sys., Inc. v. American Tel. & Tel. Co., 700 F.2d 785, 807 (2d Cir. 1983), cert. denied, 464 U.S. 1073 (1984) (similar).

60. E.g., Israel v. Baxter Laboratories, Inc., 466 F.2d 272, 279 (D.C. Cir. 1972) (misrepresentations to FDA as part of drug approval process). Cf. St. Joseph's Hosp., Inc. v. Hospital Corp. of America, 795 F.2d 948, 955 (11th Cir. 1986) (misrepresentations in application for certificate of need for new medical facility).

standards.⁶¹ Then, once the standards were adopted, it surprised rivals with the patents and requested large license fees.⁶²

As in the case of purely private standard setting, antitrust liability in holdup cases should be reserved for the relatively rare situation in which there is a clear misrepresentation to the government standard maker and clear evidence that the agency relied on the misrepresentation in setting its standard. In addition, the usual structural requirements for an antitrust violation must also be met. *Noerr* protects a right to petition the government, but not the right to make false statements to a government decision maker. And, of course, one does not even get to these issues unless it is clear that the resulting standard plus the defendant's IP rights create a clear likelihood of monopoly pricing. This could occur if the IP rights effectively excluded other firms from making the product subject to the standard and if that exclusion made it impossible for rival firms to compete effectively. Once again, the case for a patent law remedy such as equitable estoppel is at least as strong here as it is in the case of the private standard setting

61. Union Oil Co., ___ F.T.C. ___, 5 CCH Trade Reg. Rep. ¶15618 (FTC, July 6, 2004).

62. As the FTC observed:

Awareness of potential competitive harm is particularly important in settings like the one presented here. Government regulations such as CARB's standards may impose potent entry barriers capable of preserving market power over extended periods of time. Whereas an exercise of unprotected market power may sow the seeds of its own erosion if firms are free to enter and compete on equal terms with the incumbent, governmentally-enforced limits on entry may impede and even prevent that process. Consequently, misrepresentations that distort government decision making in ways that create or shield market power may inflict severe and long-lasting public harm. Such considerations support our conclusion that the substantial public interest in antitrust enforcement may outweigh countervailing policy reservations when those concerns are sufficiently muted.

(citations omitted).

The dispute was eventually resolved by a consent decree in which the FTC approved a merger between Unocal and Chevron, and Unocal agreed to dedicate the disputed patents to the public. See <http://www.unocal.com/uclnews/2005news/061005.htm> (press release).

organization.⁶³

Conclusion

Given the ubiquity of standard setting in our economy and its undisputed promotion of social welfare, claims of anticompetitive standard setting must be scrutinized very closely. Further, antitrust law is a fairly blunt instrument for dealing with such claims. Except in easy cases, antitrust fact finders lack the sophistication to pass judgment on the substantive merits of a standard. In any event, antitrust is not a roving mandate to question bad standards. It requires an injury to *competition*, and whether the minimum conditions for competitive harm are present can often be determined without examining the substance of the standard itself.

When government involvement in standard setting is substantial antitrust challenges should generally be rejected. The petitioning process in a democratic system protects even bad legislative judgments from collateral attack. In any event, antitrust's purpose is to correct private markets. It is not a general corrective for political processes that have gone awry. The best case for antitrust liability in this context occurs when the government has somehow been deceived into adopting a standard that it would not have adopted had it known the true facts. Even then, nonantitrust remedies such as equitable estoppel are probably a superior solution.

63. However, see *Bristol-Myers Squibb Co. v. Immunex Corp.*, 84 F.Supp.2d 574 (D.N.J. 2000), which concluded that because *Noerr* protected a firm's right to obtain an exclusive license based on alleged misrepresentations to the government, promissory estoppel based on same alleged misrepresentations could not be used to prevent it from enforcing those rights.