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Innovation and Competition Policy, Chapter 6 (2d ed): Restraints on Innovation

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INNOVATION AND COMPETITION POLICY, Ch. 6 (2d ed): RESTRAINTS ON INNOVATION

Herbert Hovenkamp

This book of CASES AND MATERIALS ON INNOVATION AND COMPETITION POLICY is intended for educational use. The book is free for all to use subject to an open source license agreement. It differs from IP/antitrust casebooks in that it considers numerous sources of competition policy in addition to antitrust, including those that emanate from the intellectual property laws themselves, and also related issues such as the relationship between market structure and innovation, the competitive consequences of regulatory rules governing technology competition such as net neutrality and interconnection, misuse, the first sale doctrine, and the Digital Millennium Copyright Act (DMCA). Chapters will be updated frequently. The author uses this casebook for a three-unit class in *Innovation and Competition Policy* taught at the University of Iowa College of Law and available to first year law students as an elective. The table of contents is as follows (click on chapter title to retrieve it):

[Ch. 1: Competition Policy and the Scope of Intellectual Property Protection](#)

[Ch. 2 Complementary Products and Processes: The Law of Tying](#)

[Ch. 3 Harm to Competition or Innovation; Remedies](#)

[Ch. 4 Competition Policy and the Patent System](#)

[Ch. 5 Competition and Innovation in Copyright and the DMCA](#)

[Ch. 6 Restraints on Innovation](#)

[Ch. 7 Intellectual Property Misuse](#)

[Ch. 8 Innovation, Technology, and Anticompetitive Exclusion](#)

[Ch. 9 The Innovation Commons](#)

[Ch. 10; Post-Sale and Related Distribution Restraints Involving IP Rights](#)

[Statutory Supplement and Other Materials](#)

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**INNOVATION AND COMPETITION POLICY:
CASES AND MATERIALS
HERBERT HOVENKAMP**

**CHAPTER 6 (2d ed)
RESTRAINTS ON INNOVATION**

**ALLIED TUBE & CONDUIT CORP. V. INDIAN HEAD, INC.
486 U.S. 492 (1988)**

BRENNAN, J., delivered the opinion of the Court:

Petitioner contends that its efforts to affect the product standard-setting process of a private association are immune from antitrust liability under the *Noerr* doctrine primarily because the association's standards are widely adopted into law by state and local governments. *Eastern Railroad Presidents Conference v. Noerr Motor Freight, Inc.*, 365 U.S. 127 (1961) (“*Noerr*”). The United States Court of Appeals for the Second Circuit held that *Noerr* immunity did not apply. We affirm.

The National Fire Protection Association (“Association”) is a private, voluntary organization with more than 31,500 individual and group members representing industry, labor, academia, insurers, organized medicine, firefighters, and government. The Association, among other things, publishes product standards and codes related to fire protection through a process known as “consensus standard making.” One of the codes it publishes is the National Electrical Code (“Code”), which establishes product and performance requirements for the design and installation of electrical wiring systems. Revised every three years, the Code is the most influential electrical code in the nation. A substantial number of state and local governments routinely adopt the Code into law with little or no change; private certification laboratories, such as Underwriters Laboratories, normally will not list and label an electrical product that does not meet Code standards; many underwriters will refuse to insure structures that are not built in conformity with the Code; and many electrical inspectors, contractors, and distributors will not use a product that falls outside the Code.

Among the electrical products covered by the Code is electrical

conduit, the hollow tubing used as a raceway to carry electrical wires through the walls and floors of buildings. Throughout the relevant period, the Code permitted using electrical conduit made of steel, and almost all conduit sold was in fact steel conduit. Starting in 1980, respondent began to offer plastic conduit made of polyvinyl chloride. Respondent claims its plastic conduit offers significant competitive advantages over steel conduit, including pliability, lower installed cost, and lower susceptibility to short circuiting. In 1980, however, there was also a scientific basis for concern that, during fires in high-rise buildings, polyvinyl chloride conduit might burn and emit toxic fumes.

Respondent initiated a proposal to include polyvinyl chloride conduit as an approved type of electrical conduit in the 1981 edition of the Code. Following approval by one of the Association's professional panels, this proposal was scheduled for consideration at the 1980 annual meeting, where it could be adopted or rejected by a simple majority of the members present. Alarmed that, if approved, respondent's product might pose a competitive threat to steel conduit, petitioner, the Nation's largest producer of steel conduit, met to plan strategy with, among others, members of the steel industry, other steel conduit manufacturers, and its independent sales agents. They collectively agreed to exclude respondent's product from the 1981 Code by packing the upcoming annual meeting with new Association members whose only function would be to vote against the polyvinyl chloride proposal.

Combined, the steel interests recruited 230 persons to join the Association and to attend the annual meeting to vote against the proposal. Petitioner alone recruited 155 persons-including employees, executives, sales agents, the agents' employees, employees from two divisions that did not sell electrical products, and the wife of a national sales director. Petitioner and the other steel interests also paid over \$100,000 for the membership, registration, and attendance expenses of these voters. At the annual meeting, the steel group voters were instructed where to sit and how and when to vote by group leaders who used walkie-talkies and hand signals to facilitate communication. Few of the steel group voters had any of the technical documentation necessary to follow the meeting. None of them spoke at the meeting to give their reasons for opposing the proposal to approve polyvinyl chloride conduit. Nonetheless, with their solid vote in opposition, the proposal was rejected and returned to committee by a vote of 394 to 390. Respondent appealed the membership's vote to the Association's Board of Directors, but the Board denied the appeal on the

ground that, although the Association's rules had been circumvented, they had not been violated.

In October 1981, respondent brought this suit in Federal District Court, alleging that petitioner and others had unreasonably restrained trade in the electrical conduit market in violation of § 1 of the Sherman Act, 26 Stat. 209, as amended, 15 U.S.C. § 1. A bifurcated jury trial began in March 1985. Petitioner conceded that it had conspired with the other steel interests to exclude respondent's product from the Code and that it had a pecuniary interest to do so. The jury, instructed under the rule of reason that respondent carried the burden of showing that the anticompetitive effects of petitioner's actions outweighed any procompetitive benefits of standard setting, found petitioner liable. In answers to special interrogatories, the jury found that petitioner did not violate any rules of the Association and acted, at least in part, based on a genuine belief that plastic conduit was unsafe, but that petitioner nonetheless did “subvert” the consensus standard-making process of the Association. The jury also made special findings that petitioner's actions had an adverse impact on competition, were not the least restrictive means of expressing petitioner's opposition to the use of polyvinyl chloride conduit in the marketplace, and unreasonably restrained trade in violation of the antitrust laws. The jury then awarded respondent damages, to be trebled, of \$3.8 million for lost profits resulting from the effect that excluding polyvinyl chloride conduit from the 1981 Code had of its own force in the marketplace. No damages were awarded for injuries stemming from the adoption of the 1981 Code by governmental entities.

The District Court then granted a judgment n.o.v. for petitioner, reasoning that *Noerr* immunity applied because the Association was “akin to a legislature” and because petitioner, “by the use of methods consistent with acceptable standards of political action, genuinely intended to influence the [Association] with respect to the National Electrical Code, and to thereby influence the various state and local legislative bodies which adopt the [Code].” App. to Pet. for Cert. 28a, 30a. The Court of Appeals reversed, rejecting both the argument that the Association should be treated as a “quasi-legislative” body because legislatures routinely adopt the Code and the argument that efforts to influence the Code were immune under *Noerr* as indirect attempts to influence state and local governments. *Indian Head, Inc. v. Allied Tube & Conduit Corp.*, 817 F.2d 938 (2d Cir. 1987) aff'd, 486 U.S. 492 (1988). We granted certiorari to address important issues regarding the application of *Noerr* immunity to private standard-setting associations.

Concerted efforts to restrain or monopolize trade by petitioning government officials are protected from antitrust liability under the doctrine established by *Noerr; Mine Workers v. Pennington*, 381 U.S. 657, 669-672 (1965); and *California Motor Transport Co. v. Trucking Unlimited*, 404 U.S. 508 (1972). The scope of this protection depends, however, on the source, context, and nature of the anticompetitive restraint at issue. “[W]here a restraint upon trade or monopolization is the result of valid governmental action, as opposed to private action,” those urging the governmental action enjoy absolute immunity from antitrust liability for the anticompetitive restraint. *Noerr*, 365 U.S., at 136; see also *Pennington, supra*, 381 U.S. at 671. In addition, where, independent of any government action, the anticompetitive restraint results directly from private action, the restraint cannot form the basis for antitrust liability if it is “incidental” to a valid effort to influence governmental action. *Noerr, supra*, 365 U.S. at 143. The validity of such efforts, and thus the applicability of *Noerr* immunity, varies with the context and nature of the activity. A publicity campaign directed at the general public, seeking legislation or executive action, enjoys antitrust immunity even when the campaign employs unethical and deceptive methods.. But in less political arenas, unethical and deceptive practices can constitute abuses of administrative or judicial processes that may result in antitrust violations.

In this case, the restraint of trade on which liability was predicated was the Association's exclusion of respondent's product from the Code, and no damages were imposed for the incorporation of that Code by any government. The relevant context is thus the standard-setting process of a private association. Typically, private standard-setting associations, like the Association in this case, include members having horizontal and vertical business relations. *See generally* 7 P. Areeda, *Antitrust Law* ¶ 1477, p. 343 (1986) (trade and standard-setting associations routinely treated as continuing conspiracies of their members). There is no doubt that the members of such associations often have economic incentives to restrain competition and that the product standards set by such associations have a serious potential for anticompetitive harm.FN5 *See American Society of Mechanical Engineers, Inc. v. Hydrolevel Corp.*, 456 U.S. 556, 571 (1982). Agreement on a product standard is, after all, implicitly an agreement not to manufacture, distribute, or purchase certain types of products. Accordingly, private standard-setting associations have traditionally been objects of antitrust scrutiny. *See, e.g.,* *ibid.*; *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1961) (per curiam). When, however,

private associations promulgate safety standards based on the merits of objective expert judgments and through procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition, cf. *Hydrolevel, supra*, 456 U.S., at 570-73 (noting absence of “meaningful safeguards”), those private standards can have significant procompetitive advantages. It is this potential for procompetitive benefits that has led most lower courts to apply rule-of-reason analysis to product standard-setting by private associations.

Given this context, petitioner does not enjoy the immunity accorded those who merely urge the government to restrain trade. We agree with the Court of Appeals that the Association cannot be treated as a “quasi-legislative” body simply because legislatures routinely adopt the Code the Association publishes. Whatever *de facto* authority the Association enjoys, no official authority has been conferred on it by any government, and the decisionmaking body of the Association is composed, at least in part, of persons with economic incentives to restrain trade. See *Continental Ore Co. v. Union Carbide & Carbon Corp.*, 370 U.S. 690, 707-708 (1962). “We may presume, absent a showing to the contrary, that [a government] acts in the public interest. A private party, on the other hand, may be presumed to be acting primarily on his or its own behalf.” *Hallie v. Eau Claire*, 471 U.S. 34 (1985). The dividing line between restraints resulting from governmental action and those resulting from private action may not always be obvious. But where, as here, the restraint is imposed by persons unaccountable to the public and without official authority, many of whom have personal financial interests in restraining competition, we have no difficulty concluding that the restraint has resulted from private action.

Noerr immunity might still apply, however, if, as petitioner argues, the exclusion of polyvinyl chloride conduit from the Code, and the effect that exclusion had of its own force in the marketplace, were incidental to a valid effort to influence governmental action. Petitioner notes that the lion's share of the anticompetitive effect in this case came from the predictable adoption of the Code into law by a large number of state and local governments. See *Indian Head, Inc.*, 817 F.2d at 939, n. 1. Indeed, petitioner argues that, because state and local governments rely so heavily on the Code and lack the resources or technical expertise to second-guess it, efforts to influence the Association's standard-setting process are the most effective means of influencing legislation regulating electrical conduit. This claim to *Noerr* immunity has some force. The effort to influence governmental action in this case certainly cannot be characterized as a sham

given the actual adoption of the 1981 Code into a number of statutes and local ordinances. Nor can we quarrel with petitioner's contention that, given the widespread adoption of the Code into law, any effect the 1981 Code had in the marketplace of its own force was, in the main, incidental to petitioner's genuine effort to influence governmental action. And, as petitioner persuasively argues, the claim of *Noerr* immunity cannot be dismissed on the ground that the conduct at issue involved no "direct" petitioning of government officials, for *Noerr* itself immunized a form of "indirect" petitioning. *See Noerr* (immunizing a publicity campaign directed at the general public on the ground that it was part of an effort to influence legislative and executive action).

Nonetheless, the validity of petitioner's actions remains an issue. We cannot agree with petitioner's absolutist position that the *Noerr* doctrine immunizes every concerted effort that is genuinely intended to influence governmental action. If all such conduct were immunized then, for example, competitors would be free to enter into horizontal price agreements as long as they wished to propose that price as an appropriate level for governmental ratemaking or price supports. Horizontal conspiracies or boycotts designed to exact higher prices or other economic advantages from the government would be immunized on the ground that they are genuinely intended to influence the government to agree to the conspirators' terms. Firms could claim immunity for boycotts or horizontal output restrictions on the ground that they are intended to dramatize the plight of their industry and spur legislative action. Immunity might even be claimed for anticompetitive mergers on the theory that they give the merging corporations added political clout. Nor is it necessarily dispositive that packing the Association's meeting may have been the most effective means of securing government action, for one could imagine situations where the most effective means of influencing government officials is bribery, and we have never suggested that that kind of attempt to influence the government merits protection. We thus conclude that the *Noerr* immunity of anticompetitive activity intended to influence the government depends not only on its impact, but also on the context and nature of the activity.

Here petitioner's actions took place within the context of the standard-setting process of a private association. Having concluded that the Association is not a "quasi-legislative" body, we reject petitioner's argument that any efforts to influence the Association must be treated as efforts to influence a "quasi-legislature" and given the same wide berth accorded legislative lobbying. That rounding up supporters is an acceptable

and constitutionally protected method of influencing elections does not mean that rounding up economically interested persons to set private standards must also be protected. Nor do we agree with petitioner's contention that, regardless of the Association's nonlegislative status, the effort to influence the Code should receive the same wide latitude given ethically dubious efforts to influence legislative action in the political arena, *see Noerr*, 365 U.S. at 140-41, simply because the ultimate aim of the effort to influence the private standard-setting process was (principally) legislative action. The ultimate aim is not dispositive. A misrepresentation to a court would not necessarily be entitled to the same antitrust immunity allowed deceptive practices in the political arena simply because the odds were very good that the court's decision would be codified-nor for that matter would misrepresentations made under oath at a legislative committee hearing in the hopes of spurring legislative action.

What distinguishes this case from *Noerr* and its progeny is that the context and nature of petitioner's activity make it the type of commercial activity that has traditionally had its validity determined by the antitrust laws themselves. True, in *Noerr* we immunized conduct that could be characterized as a conspiracy among railroads to destroy business relations between truckers and their customers. *Noerr, supra*, 365 U.S. at 142. But we noted there:

“There are no specific findings that the railroads attempted directly to persuade anyone not to deal with the truckers. Moreover, all the evidence in the record, both oral and documentary, deals with the railroads' efforts to influence the passage and enforcement of laws. Circulars, speeches, newspaper articles, editorials, magazine articles, memoranda and all other documents discuss in one way or another the railroads' charges that heavy trucks injure the roads, violate the laws and create traffic hazards, and urge that truckers should be forced to pay a fair share of the costs of rebuilding the roads, that they should be compelled to obey the laws, and that limits should be placed upon the weight of the loads they are permitted to carry.”

In light of those findings, we characterized the railroads' activity as a classic “attempt ... to influence legislation by a campaign of publicity,” an “inevitable” and “incidental” effect of which was “the infliction of some direct injury upon the interests of the party against whom the campaign is directed.” The essential character of such a publicity campaign was, we

concluded, political, and could not be segregated from the activity's impact on business. Rather, the plaintiff's cause of action simply embraced the inherent possibility in such political fights "that one group or the other will get hurt by the arguments that are made." *Id.* at 144. As a political activity, special factors counseled against regulating the publicity campaign under the antitrust laws:

"Insofar as [the Sherman] Act sets up a code of ethics at all, it is a code that condemns trade restraints, not political activity, and, as we have already pointed out, a publicity campaign to influence governmental action falls clearly into the category of political activity. The proscriptions of the Act, tailored as they are for the business world, are not at all appropriate for application in the political arena. Congress has traditionally exercised extreme caution in legislating with respect to problems relating to the conduct of political activities, a caution which has been reflected in the decisions of this Court interpreting such legislation. All of this caution would go for naught if we permitted an extension of the Sherman Act to regulate activities of that nature simply because those activities have a commercial impact and involve conduct that can be termed unethical."

In *Noerr*, then, the political context and nature of the activity precluded inquiry into its antitrust validity.

Here the context and nature of the activity do not counsel against inquiry into its validity. Unlike the publicity campaign in *Noerr*, the activity at issue here did not take place in the open political arena, where partisanship is the hallmark of decisionmaking, but within the confines of a private standard-setting process. The validity of conduct within that process has long been defined and circumscribed by the antitrust laws without regard to whether the private standards are likely to be adopted into law. Indeed, because private standard-setting by associations comprising firms with horizontal and vertical business relations is permitted at all under the antitrust laws only on the understanding that it will be conducted in a nonpartisan manner offering procompetitive benefits, *see ibid.*, the standards of conduct in this context are, at least in some respects, more rigorous than the standards of conduct prevailing in the partisan political arena or in the adversarial process of adjudication. The activity at issue here thus cannot, as in *Noerr*, be characterized as an activity that has traditionally been regulated with extreme caution, *see Noerr*, 365 U.S. at

141, or as an activity that “bear[s] little if any resemblance to the combinations normally held violative of the Sherman Act.” And petitioner did not confine itself to efforts to persuade an independent decisionmaker, cf. *Id.*, at 138, 139 (describing the immunized conduct as “mere solicitation”); rather, it organized and orchestrated the actual exercise of the Association's decisionmaking authority in setting a standard. Nor can the setting of the Association's Code be characterized as merely an exercise of the power of persuasion, for it in part involves the exercise of market power. The Association's members, after all, include consumers, distributors, and manufacturers of electrical conduit, and any agreement to exclude polyvinyl chloride conduit from the Code is in part an implicit agreement not to trade in that type of electrical conduit. Although one could reason backwards from the legislative impact of the Code to the conclusion that the conduct at issue here is “political,” we think that, given the context and nature of the conduct, it can more aptly be characterized as commercial activity with a political impact. Just as the antitrust laws should not regulate political activities “simply because those activities have a commercial impact,” *Id.* at 141, so the antitrust laws should not necessarily immunize what are in essence commercial activities simply because they have a political impact....

Thus in this case the context and nature of petitioner's efforts to influence the Code persuade us that the validity of those efforts must, despite their political impact, be evaluated under the standards of conduct set forth by the antitrust laws that govern the private standard-setting process. The antitrust validity of these efforts is not established, without more, by petitioner's literal compliance with the rules of the Association, for the hope of procompetitive benefits depends upon the existence of safeguards sufficient to prevent the standard-setting process from being biased by members with economic interests in restraining competition. An association cannot validate the anticompetitive activities of its members simply by adopting rules that fail to provide such safeguards. The issue of immunity in this case thus collapses into the issue of antitrust liability. Although we do not here set forth the rules of antitrust liability governing the private standard-setting process, we hold that at least where, as here, an economically interested party exercises decision-making authority in formulating a product standard for a private association that comprises market participants, that party enjoys no *Noerr* immunity from any antitrust liability flowing from the effect the standard has of its own force in the marketplace.

This conclusion does not deprive state and local governments of input and information from interested individuals or organizations or leave petitioner without ample means to petition those governments. Petitioner, and others concerned about the safety or competitive threat of polyvinyl chloride conduit, can, with full antitrust immunity, engage in concerted efforts to influence those governments through direct lobbying, publicity campaigns, and other traditional avenues of political expression. To the extent state and local governments are more difficult to persuade through these other avenues, that no doubt reflects their preference for and confidence in the nonpartisan consensus process that petitioner has undermined. Petitioner remains free to take advantage of the forum provided by the standard-setting process by presenting and vigorously arguing accurate scientific evidence before a nonpartisan private standard-setting body. And petitioner can avoid the strictures of the private standard-setting process by attempting to influence legislatures through other forums. What petitioner may not do (without exposing itself to possible antitrust liability for direct injuries) is bias the process by, as in this case, stacking the private standard-setting body with decisionmakers sharing their economic interest in restraining competition.

The judgment of the Court of Appeals is

Affirmed.

NOTES AND QUESTIONS

1. Private standard setting is often socially beneficial. It can improve product quality, increase compatibility or interoperability, or reduce costs by permitting larger output of a common product, thereby creating economies of scale. Herbert Hovenkamp, Standards Ownership and Competition Policy, 48 B.C. L. Rev. 87, 90 (2007) However, private standard setting can facilitate collusion and exclusion. Collusion most typically occurs when standards are created or enforced by competing producers. Exclusion occurs when standards are used to keep some producers out of the market. These possibilities make it important to identify circumstances where standards are used anticompetitively.

2. In *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1961), the Supreme Court sustained a complaint that the defendants, a group of heater manufacturers, gas utilities, and insurance companies, excluded the plaintiff's heater design because it was dangerous. The

plaintiff alleged that the exclusion was simply a conspiracy to get the plaintiff's heater off the market. That might be a perfectly good explanation why competing heater manufacturers would want to exclude the plaintiff's heater. But what must have motivated natural gas utilities and fire insurance companies, who also allegedly participated in the exclusionary decision?

3. Today it is widely believed that innovation contributes far more to economic growth than the simple movement of markets toward greater competitiveness under constant technology. See, e.g., Robert M. Solow, *Technical Change and the Aggregate Production Function*, 3 REV.ECON.STAT. 312 (1957); Robert M. Solow, *A Contribution to the Theory of Economic Growth*, 70 Q.J.ECON. 65 (1956); Trevor W. Swan, *Economic Growth and Capital Accumulation*, 32 ECON.REC. 334 (1956). If that is so, then it is also likely that a practice that restrains innovation can do much more harm to the economy than a practice that simply maintains prices at higher than the competitive level. Does this mean that antitrust authorities should be spending relatively more time pursuing innovation restraints? As the *Kloth* case, reprinted *infra*, indicates, problems of proving causation and harm are significant.

NOTE:

MERGERS AND RESTRAINTS ON INNOVATION

The most commonly given reason that the antitrust laws condemn mergers as anticompetitive is that they threaten higher prices in some market, either by permitting market wide collusion or by permitting a firm to raise its own prices "unilaterally" by eliminating a fairly close rival. Merger Guidelines issued by the Department of Justice Antitrust Division and the Federal Trade Commission in 2010 describe the theories and techniques that these government agencies will use to challenge mergers as anticompetitive under the antitrust laws (§ 7 of the Clayton Act, but also occasionally §§ 1 or 2 of the Sherman Act).

The 2010 Guidelines include a separate section on mergers limiting "innovation and product variety." Guidelines, §6.4 which is concerned with "unilateral effects arising from diminished innovation or reduced product variety." As the Guidelines state:

The [enforcement] Agencies may consider whether a merger is likely to diminish innovation competition by encouraging the merged firm to curtail its innovative efforts below the level that would prevail in the absence of the merger. That curtailment of innovation could take the form of reduced incentive to continue with an existing product-development effort or reduced incentive to initiate development of new products.

The first of these effects is most likely to occur if at least one of the merging firms is engaging in efforts to introduce new products that would capture substantial revenues from the other merging firm. The second effect, which would be felt over the longer run, is most likely to occur if at least one of the merging firms has capabilities that are likely to lead it to develop new products in the future that would capture substantial revenues from the other merging firm. The Agencies therefore also consider whether a merger will diminish innovation competition by combining two of a very small number of firms with the strongest capabilities to innovate in a specific direction.

2010 Horizontal Merger Guidelines, available at
<http://www.justice.gov/atr/public/guidelines/hmg-2010.html>

The concern is hardly fanciful and has been known since the beginning of the twentieth century. For example, in the *Paper Bag* patent litigation, which reached the Supreme Court in 1908, the dominant firm had acquired a patent in a technology that competed with technology it was already using. It did not use the patent at all, preferring to stick with its existing technology, but also refused to license it to others and filed a successful infringement action against a rival firm that developed technology that infringed the acquired patent. The case is reprinted in Chapter Eight. See also Herbert Hovenkamp, *Harm to Competition Under the 2010 Horizontal Merger Guidelines*, 39 REV. INDUS.ORG. 3 (2011).

The 2010 Merger Guidelines seem to be giving the nod to the Arrow side of the Schumpeter-Arrow “debate” over the relationship between innovation and market structure. Joseph Schumpeter famously argued in the 1940s that monopolists had a far greater incentive to innovate than competitors; only monopolists had the resources and they were in far the best position to capture the returns from innovation. Further, dominant firms typically have a “head start” in innovation that makes it more likely that they will capture the returns. See JOSEPH A. SCHUMPETER,

CAPITALISM, SOCIALISM AND DEMOCRACY (1942), particularly chapter 7, on “The Process of Creative Destruction.”

In sharp contrast, Kenneth Arrow argued that greater competition is in fact more conducive to innovation. Monopolists tend to become heavily invested in their technology and will willingly innovate along the same technological path by building on what they have. But outside firms have a much greater interest in truly innovative technologies that will upend the dominant firm’s market position. That is, smaller rivals have every incentive to innovate more radically. Further, the monopolist is already earning monopoly returns, while small rivals are earning only the competitive return, so they have much more to gain. Further, a competitor has everything to lose if a *different* competitor innovates. See Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in *ESSAYS IN THE THEORY OF RISK-BEARING* 144, 157 (3d ed. 1976) (1962). See also TIM WU, *THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES* (2010), which details how over the history of telecommunications and related technologies most of the truly radical innovations have come from outsiders who often upended entrenched dominant firms; see also Tim Wu, *Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most*, 78 *ANTITRUST L.J.* 313 (2012)

Today the general consensus is that the truth lies between the two positions articulated by Schumpeter and Arrow, and that the relationship between innovation and market structure is an inverted “U” shaped curve. That is, monopolists have less than optimal incentives to innovate, but so do the firms in highly competitive markets. Most of the innovation occurs in markets that are moderately concentrated (say, 4-10 firms). See CHRISTINA BOHANNAN & HERBERT HOVENKAMP, *CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION*, Ch. 1 (2011); Jonathan Baker, *Beyond Schumpeter and Arrow: How Antitrust Fosters Innovation*, 74 *ANTITRUST L.J.* 575, 586 (2007). For other arguments that innovation policy must take antitrust-like considerations more into account, including evaluations of market structure, see Tim Wu, *Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most*, 78 *Antitrust L.J.* 313 (2012); Mark A. Lemley, *Industry-Specific Antitrust Policy for Innovation*, 2011 *COLUM. BUS. L. REV.* 637, 637 (2011 Milton Handler Lecture).

In *Free Hand Corp. v. Adobe Sys., Inc.*, 852 F.Supp.2d 1171 (N.D.Cal. 2012), the court sustained a complaint that Adobe, a leading manufacturer of commercial graphic illustration software, acquired a rival's competing freeware program and then raised the price of its own

commercial program, while effectively removing the freeware from the market by ceasing to update it. The plaintiffs alleged that the acquisition permitted Adobe to raise its own product price while restraining innovation in the market for graphics design software.

KLOTH V. MICROSOFT CORP.
444 F.3d 312 (4th Cir. 2006)

Niemeyer, Circuit Judge:

This appeal, a part of the multidistrict class action antitrust litigation brought against Microsoft Corporation by 39 purchasers of Microsoft's operating system software and applications software, presents the question whether 26 indirect purchasers have stated a claim upon which relief can be granted. See Fed.R.Civ.P. 12(b)(6). The district court granted Microsoft's motion to dismiss their claims.... The court ... found that they lacked standing to seek recovery for certain types of injury because the alleged injury did not constitute "antitrust injury," was speculative, or was generalized and not specific to the plaintiffs. The court dismissed the plaintiffs' equitable claims under the doctrine of laches. For the reasons that follow, we affirm.

In the aftermath of the United States' suit against Microsoft, in which Microsoft was found to have maintained an illegal monopoly in the worldwide market for licensing Intel-compatible PC operating systems, *see United States v. Microsoft Corp.*, 253 F.3d 34 (D.C.Cir.2001), numerous class action suits were filed against Microsoft in courts across the country. On April 25, 2000, the Judicial Panel on Multidistrict Litigation transferred the cases that were pending in federal district courts to the District of Maryland, pursuant to 28 U.S.C. § 1407. Thereafter, 39 plaintiffs filed a superseding consolidated amended complaint, seeking damages and equitable relief under the Clayton and Sherman Acts.

In their 66-page consolidated amended complaint, the plaintiffs allege that beginning in the late 1980s, when Microsoft's market share in the United States for operating system software was 95 percent, Microsoft engaged in a series of predatory acts that were designed to, and did, eliminate competition and prevent entry into the operating system software market. They allege that since 1994, when Digital Research, Inc. and IBM were eliminated as meaningful competitors, Microsoft has had no significant competitor in the operating systems software market. They assert that Microsoft used this monopoly power to raise prices and to leverage its

power into other markets, including markets for applications software such as word processing, spreadsheet, and office suite software, with the result that Microsoft has dominated these applications software markets since the mid-1990s, achieving market shares approaching 90 percent. Thus, for the time periods material to the complaint, the plaintiffs contend that Microsoft has had monopoly power in four product markets: (1) The licensing of Intel-compatible personal computer operating systems software; (2) the licensing of Intel-compatible personal computer word processing applications software; (3) the licensing of Intel-compatible personal computer spreadsheet applications software; and (4) the licensing of Intel-compatible personal computer office suite applications software.

The plaintiffs allege that Microsoft maintained and advanced its monopoly power by refusing to sell its software to manufacturers, retailers, and consumers. Instead, they allege, Microsoft employed a two-tier licensing system. It used one type of license for transactions with “original equipment manufacturers” (“OEMs”), allowing them to preinstall software on personal computers, which they in turn sold to consumers or “end-users.” The plaintiffs claim that Microsoft was able to require OEMs to accept the terms of Microsoft's licensing agreement, forcing the OEMs to preinstall Microsoft operating systems on personal computers they sell and to act as Microsoft's agents in offering a second type of license, called “end-user license agreements” (“EULAs”), for acceptance or rejection by consumers under terms dictated by Microsoft. To use Microsoft software, the end-users were required to agree to the EULAs, which provided, among other things, a Microsoft-funded refund to the end-user if the end-user declined to enter into the EULA. The EULAs imposed significant restrictions on use of the software by the licensee, giving Microsoft remedies against the end-user for breach of the license agreement. The complaint alleges in a similar manner that Microsoft dictated the terms and conditions under which distributors and retailers were able to sell EULAs.

The plaintiffs claim that under this two-tier licensing regime, most consumers did not purchase software licenses directly from Microsoft. Rather, they bought computers from OEMs or retailers with pre-installed software that incorporated Microsoft's offer to issue the end-user a license agreement. The 26 plaintiffs who have appealed here are typical of those who purchased computers from OEMs or retailers with preinstalled software.

The plaintiffs allege that Microsoft's exclusionary and restrictive

practices caused them injury by charging them “supra-competitive” prices for operating systems software and applications software, by denying them the benefit of new and superior technologies, and by preventing them from reselling Microsoft software products. They also claim that by integrating its Internet Explorer web browser with its operating system, Microsoft deprived them of alternative Internet search engines, degraded the performance of their computers, and made their computers more susceptible to security breaches. In short, they allege that as end-users, they paid “supra-competitive” prices for software and were deprived of the benefits of competition including, but not limited to, technological innovation, market choice, product variety, and substitutable supply. They request equitable relief, treble damages, attorneys fees, and costs....

... the plaintiffs claim that Microsoft's integration of Internet Explorer and Windows caused them direct injury because it resulted in performance degradation of their computers. This claim either mirrors the assertion that Microsoft suppressed superior technologies or seeks recovery for injuries that are not antitrust injuries. If Microsoft developed inferior technology, it essentially overcharged intermediaries for the value of its products, as measured by the price it would have obtained in a competitive market. Such injury is no different in principle from the restrictions on end-user licenses and the suppression of substitute technologies. All are essentially claims for illegal overcharges passed on to consumers. And to the extent that Microsoft's software degraded the performance of plaintiffs' computers, then any such damage would not form the basis of a claim for antitrust injury but a claim for some type of product liability injury. Presumably plaintiffs could make that claim just as they could for any other product liability claim.....

In addition to claiming injury based on the allegation that Microsoft charged supra-competitive prices... plaintiffs claim ... other types of injury. They have alleged that (1) they were deprived of the benefits of competitive technology; (2) they sustained injury from restrictions imposed in the EULAs prohibiting them from reselling Microsoft software in a secondary or “used” market; and (3) their computers were degraded by the integration of the Internet Explorer web browser with the Windows operating system.

... To have § 4 standing, the plaintiffs must demonstrate direct antitrust-type injury, not simply any injury that was caused by an antitrust violation. “Congress did not intend to allow every person tangentially

affected by an antitrust violation to maintain an action to recover threefold damages for injury to his business or property.” *Associated General Contractors*, 459 U.S. at 535. To determine whether a person has sustained direct antitrust-type injury to his business or property, a court must consider the five factors identified in *Associated General Contractors*: (1) the causal connection between an antitrust violation and harm to the plaintiffs, and whether that harm was intended; (2) whether the harm “was of a type that Congress sought to redress in providing a private remedy for violations of the antitrust laws”; (3) the directness of the alleged injury; (4) “the existence of more direct victims” of the alleged antitrust injury; and (5) “problems of identifying damages and apportioning them” among those directly and indirectly harmed.

When considering the three types of injury that plaintiffs claim to have sustained directly-injuries other than supra-competitive prices—we conclude, by applying the *Associated General Contractors* factors, that plaintiffs' injuries were too generalized or speculative; that some injuries were not of the type covered by the antitrust law; that there were more direct victims; and that plaintiffs' claims raise insuperable problems in measuring and allocating damages.....

First, with respect to plaintiffs' claims that Microsoft deprived consumers of competitive technology, we agree with the conclusions reached by the district court. The court observed, “It would be entirely speculative and beyond the competence of a judicial proceeding to create in hindsight a technological universe that never came into existence.” The court continued, “It would be even more speculative to determine the relevant benefits and detriments that non-Microsoft products would have brought to the market and the relative monetary value ... to a diffuse population of end users.” *Id.* While plaintiffs assert that they should be given discovery with respect to these issues, it is readily apparent that discovery would not change or inform the nature of the alleged injuries. As the district court stated,

The underlying reason that plaintiffs lack standing is that, to the extent they are seeking damages ... for the denial of the benefit of technologically superior products, it is merely coincidental that they purchased Microsoft products at all. They occupy a position no different from any other end user of computer products who never purchased any Microsoft software or EULAs.

At bottom, the harms that the plaintiffs have alleged with respect to the loss of competitive technologies are so diffuse that they could not possibly be adequately measured. The problem is not one of discovery and specific evidence, but of the nature of the injury claimed. Where the purported injuries amount to generalized or abstract societal harms, the plaintiffs cannot claim that they, as distinct from others in society, were specifically injured in their business or property by the alleged antitrust violation, as required by § 4.

With respect to plaintiffs' alleged injury from Microsoft's restrictions on end-users in the EULAs, the plaintiffs lack standing because there are more direct victims-i.e., the retailers and OEMs-and because it is too costly for courts to discern the allocation of such damages.....

... The plaintiffs also claim that the integration of Windows and the Internet Explorer web browser resulted in specific harms to their computers including “loss of speed and memory ... loss of operating system stability and increased susceptibility to viruses or security breaches.” To the extent that these claims are for actual injury to plaintiffs' computers, the plaintiffs' claims amount to claims for defective products. This type of injury is simply not a type for which plaintiffs can recover under the antitrust law. See *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489 (1977). Rather, it sounds more in the nature of injury from a breach of warranty or other product liability. And plaintiffs do not assert that Microsoft intended to cause this harm to plaintiffs' computers or that Microsoft's purpose for inflicting this injury was aimed at lessening competition. As the district court observed, “the degradation of computer performance alleged by plaintiffs is only incidentally related to the alleged anti-competitive behavior.” *In re Microsoft*, 127 F.Supp.2d at 712.

In short, we agree with the district court that ... plaintiffs have failed to demonstrate that they have sustained direct antitrust-type injury, as required by § 4 of the Clayton Act and *Associated General Contractors*.

Finally, we address whether the district court abused its discretion in dismissing plaintiffs' claims for injunctive relief under the doctrine of laches. See *White v. Daniel*, 909 F.2d 99, 102 (4th Cir.1990) (“[T]he equitable balancing of a plaintiff's delay with prejudice to a defendant is primarily left to the sound discretion of the trial court, and we may not reverse unless it is so clearly wrong as to amount to an abuse of discretion”) (internal quotation marks omitted) (emphasis added). In dismissing the

plaintiffs' claims for equitable relief, the district court concluded that the plaintiffs failed to pursue their injunctive claims with diligence and that their failure prejudiced Microsoft. *See Giddens v. Isbrandtsen Co.*, 355 F.2d 125, 127 (4th Cir.1966) (noting that laches may be applied when a plaintiff fails to pursue his claim with diligence, causing prejudice to the opposing party).

The plaintiffs argue that they did not pursue their equitable claims because they were involved in class action settlement proceedings. They suggest that it would have made no sense to press their claims until those proceedings were resolved. In addition, the plaintiffs assert that Microsoft had notice of the nature of their claims for injunctive relief and suffered no prejudice in the form of “unfair surprise or inability to prepare its defense.”

In response, Microsoft argues that plaintiffs filed only a generalized claim requesting injunctive relief in 2000 but waited more than four years before articulating the nature of the injunctive relief that they were seeking. Microsoft contends that this delay made it impossible for it to coordinate any consideration of remedies with the litigation in the United States' action against Microsoft then pending before Judge Kollar-Kotelly in the District of Columbia District Court. Microsoft argues that if the equitable claims had not been dismissed, a second round of litigation over the market effects of the proposed consent decree in the United States' action would have been required.

Accepting Microsoft's arguments, the district court stated that it was “perfectly clear ... that the plaintiffs in the consolidated amended complaint were not pursuing injunctive claims with diligence. The focus was on monetary damages.” The court also relied on the fact that the inability to coordinate with the United States' action caused prejudice because the simultaneous proceedings would have “reshape[d] the competitive landscape.” Finally, the court noted that despite years of litigation, the plaintiffs had only recently specified the nature of their request for equitable relief and that they were using the initial “vague claim” for equitable relief as “a vessel for, essentially, asserting new claims.” Permitting that result would, in the district court's judgment, be “contrary to the public interest.”

In the circumstances of this case, we conclude that the district court did not abuse its discretion in applying the doctrine of laches to dismiss plaintiffs' equitable claims.

AFFIRMED.

NOTES AND QUESTIONS

1. As the *Kloth* decision suggests, when the plaintiff's alleged harm includes foreclosure of *nascent* products or technologies it is almost impossible for the plaintiff to show that the new product or technology would have come to fruition and would have been commercially successful but for the restraint. This makes proof of causation, harm, and damages extremely difficult. By contrast, as the preceding *Allied Tube* decision suggests, this standard is much more easily satisfied if the product has already been developed and is ready to be marketed. For this reason and many others, antitrust often falls short of optimal protection for consumers. See Daniel A. Crane, *Optimizing Private Antitrust Enforcement*, 63 VAND.L.REV. 675 (2010).

2. In the 1960s the Government brought an antitrust action alleging that the major automobile manufacturers in the United States had conspired with each other to slow down investment in the development of air pollution control equipment for automobiles. Specifically, the government claimed that the defendants conspired "to eliminate competition in the research, development, manufacture and installation of motor vehicle air pollution control equipment, and in the purchase from others of patents and patent rights, covering such equipment." The case ended in a consent decree, to which a number of local governments rigorously objected. As the County of Los Angeles wrote:

The County of Los Angeles and the [California] Air Pollution Control District have been actively engaged in the control of air pollution for over two decades. The Air Pollution Control Law of 1947 adopted by the California Legislature recognized and used throughout the nation as a model for effective air pollution control regulations....

Los Angeles County, with its low wind velocities and frequent temperature inversions, is especially susceptible to air pollution. Emissions of air contaminants from stationery sources are

strictly controlled by law; but each day motor vehicles discharge 12,000 tons of hydrocarbons, carbon monoxide, oxides of nitrogen, and other contaminants into the air of the Los Angeles Basin.

The fact that emissions from motor vehicles pollute the air has been known for many years. In the early 1950's the automobile was clearly identified by scientists as the primary cause of the typical Los Angeles photochemical "smog."

These matters were known to the automobile manufacturers, and County officials regularly informed them and communicated with them. The manufacturers neither recognized that they had any responsibility for developing air pollution control devices nor did they make any substantial effort to develop them.

In 1953, the manufacturers entered into the agreements which constituted the alleged combination in restraint of trade. In 1955 the cross-licensing and "most favored purchaser" agreements were made. No devices were produced....

Amicus Brief of the County of Los Angeles, United States v. Auto. Mfgs. Ass'n, 307 F. Supp. 617 (C.D. Cal 1969), *appeal dismissed sub nom. City of New York v. United States*, 397 U.S. 248 (1970).

However, the restraint involved equipment that was never developed. Subsequent private actions ran aground for largely the same reasons as given in the principal case. See *In re Motor Vehicle Air Pollution Control Equip.*, 481 F.2d 122 (9th Cir. 1973). See also *Ford Motor Co. v. Lane*, 86 F. Supp. 2d 711 (E.D. Mich. 2000) (denying antitrust standing on plaintiff's claim that Ford had the capacity to build more efficient, lower emission vehicles but failed to do so as a result of a conspiracy with other automakers; in denying standing, court concluded that plaintiff's true injury resulted from the fact that he had to purchase more gasoline than he would have had to purchase if his engine had been more efficient, and that Ford did not operate in the gasoline market). Cf. *Ass'n of Washington Pub. Hosp. Dists. v. Philip Morris*, 241 F.3d 696 (9th Cir. 2001) (hospitals lacked standing to sue cigarette companies on claim that latter conspired to restrain development of safer cigarettes).