7 The essential facilities doctrine

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Introduction

According to some courts and commentators, the essential facilities doctrine sometimes requires a monopolist to provide access to a ‘facility’ under the monopolist’s control that is deemed necessary for effective competition. Although sometimes the facility is literally a physical facility, in principle the doctrine could apply to other types of property or inputs as well including intangibles such as intellectual property. To describe the doctrine as controversial is a gross understatement; indeed, commentary on the nature of the doctrine often bears an uncanny resemblance to theological debate. Disagreement exists on almost every key issue including whether the doctrine exists at all (thus far the US Supreme Court has professed its agnosticism); what its essential characteristics are (for example, whether the monopolist must operate in two vertically related markets and whether the antitrust plaintiff must be a potential competitor of the monopolist); and whether the doctrine performs any function that cannot just as easily be performed by other, more conventional antitrust doctrines. To paraphrase the French mathematician, Laplace, is the essential facilities doctrine a hypothesis we do not need? Is it merely a relic of a bygone era of antitrust enforcement, grounded in scholastic scruples over fair dealing and just pricing, which the enlightened rationality of Hyde Park, home of the University of Chicago, and Cambridge has since convincingly dismissed as nothing more than fuzzy-headed superstition? Does the essential facilities doctrine demand too much faith in courts’ abilities to regulate prices and output or to create conditions conducive to future innovation? Conversely might the essential facilities doctrine continue to play at least an occasional role in antitrust law as some sort of deus ex machina or doctrine ‘of the gaps’ to be invoked in anomalous cases? Might it potentially play an important role – perhaps more important today than ever before – in ensuring access to the essential infrastructure (the ‘ground of our competing’, if you will) that underlies our technologically advanced, information-based economy? Interestingly the European Community (EC) have been much less skeptical than mainstream US courts and commentators in recognizing an essential facilities-like doctrine under the rubric of ‘abuse of dominant position’. In the future, this divergence between the US and European approaches may have profound
implications for global commerce although it may be too early to predict the long-run impact. God, as the Modernist architect, Mies van der Rohe, once observed, is in the details.

This chapter discusses the essential facilities doctrine principally as applied, critiqued and propounded by US and EC courts and commentators. Part I provides an overview of the doctrine in the US and the EC; it also notes the doctrine’s possible applications to intellectual property and some differences between the US and EC approaches. Part II discusses the economic arguments for and against the doctrine generally and with respect to various sub-issues, such as the necessity of proving two vertically-related markets. Part III concludes.

Part I Overview
Although no US Supreme Court decision ever explicitly invoked the essential facilities doctrine, advocates of the doctrine trace its lineage to a series of Supreme Court decisions decided on other grounds that might, in the alternative, support an essential facilities rationale. This Part provides a brief overview of these cases, as well as a few lower court decisions that explicitly invoked essential facilities. It also presents a brief discussion of the parallel doctrine under EC law.

US Supreme Court decisions
A case that many observers perceive as the genesis of the essential facilities doctrine is *United States v. Terminal Railroad Association*, a 1912 decision of the US Supreme Court. Fourteen railroads owned stock in the Terminal Railroad Association, a company that eventually controlled all three railroad terminal facilities leading into or out of St. Louis, Missouri. In concluding that the combination violated §§ 1 and 2 of the Sherman Act, the Supreme Court noted that the association was not independent from its shareholders which consisted exclusively of competing railroads, and that the association, in addition to operating and charging for the use of terminal facilities, also set rates for the transportation of freight into and out of St. Louis. The shareholders’ use of the association to fix transportation prices appeared highly suspect as a form of horizontal price fixing. Much of the Court’s analysis, however, focused on (1) the fact that geographical and cost considerations substantially limited the number of competing terminals that could be erected in the St. Louis area and (2) the allegedly arbitrary and discriminatory nature of the prices the association charged for transportation through St. Louis. In addition, the remedy the Court ordered – that the association amend its charter to permit previously excluded rail lines from membership and cease its allegedly arbitrary and discriminatory pricing practices or else face dissolution – appears to
have contemplated some ongoing supervision of the association by the courts or the Interstate Commerce Commission. Thus, while *Terminal Railroad* can be viewed as a garden-variety horizontal price fixing case in some respects, advocates of an essential facilities doctrine cite much of the Court’s analysis, as well as the ordered remedy, as lending support to the notion that an entity controlling access to a facility to which other firms need access in order to compete has a duty to deal with these firms on reasonable and non-discriminatory terms. For this reason, *Terminal Railroad* is often cited as the first case recognizing the essential facilities doctrine even though it involved concerted rather than unilateral conduct, unlike some of the more recent cases invoking the doctrine.

Another case sometimes viewed as lending support for the essential facilities doctrine is *Associated Press v. United States*, in which the Supreme Court condemned the practices of the Associated Press (AP) of permitting member newspapers to block competing newspapers from membership and requiring members to supply AP exclusively with the news each member generated. As in *Terminal Railroad*, the Court did not explicitly endorse an essential facilities doctrine. While opinions differ on the merits of the outcome the Court reached, that outcome can be interpreted in a manner consistent with standard § 1 analysis of concerted refusals to deal. AP potentially wielded considerable market power, and the restraints at issue, while perhaps necessary to some degree to prevent new entrants from free-riding on the investigatory efforts of incumbent members operating within the same geographic market, may have been much broader than was necessary to achieve any procompetitive purpose. Commentators nevertheless sometimes cite this decision as consistent with an essential facilities rationale. Membership in the AP being essential to competition in some newspaper markets, so the argument goes, antitrust law rightly imposed a duty upon the AP member newspapers to deal with potential competitors on reasonable and non-discriminatory terms.

The principal Supreme Court decision that might be viewed as supporting the essential facilities doctrine is *Otter Tail Power Co. v. United States*. Three towns that had been purchasing electric power from Otter Tail decided to establish their own, municipally-owned utility. Otter Tail allegedly retaliated by refusing to make wholesale sales of electricity to the new entities or to transmit (‘wheel’) electric power from other sources to these entities using Otter Tail’s own power lines. The Supreme Court held that Otter Tail’s refusal to deal constituted an attempt to maintain its monopoly, in violation of Sherman Act § 2. In particular, the Court affirmed the district court’s finding that ‘Otter Tail’s refusals to sell at wholesale or to wheel were solely to prevent municipal power systems from eroding its monopolistic position’, and affirmed an injunction.
requiring Otter Tail to sell and to wheel ‘at rates which are compensatory and under terms and conditions which are filed with and subject to approval by the Federal Power Commission’. 13 As in *Terminal Railroad* and *Associated Press*, however, the Court did not purport to be creating a new doctrine and did not use the term ‘essential facilities’, and the fact that Otter Tail was a regulated utility might suggest only a limited need for ongoing judicial oversight of the terms of the injunction. Whether *Otter Tail* lends strong support to an essential facilities doctrine therefore remains hotly debated. Compounding the debate is the fact that *Otter Tail* was a 4 to 3 decision, authored by Justice Douglas; two justices having recused themselves from participating in the case. The opinion of dissenting Justice Stewart, while concluding principally that the Federal Power Act preempted the assertion of antitrust law under the circumstances, nevertheless strongly suggests the dissenting justices’ view that Otter Tail’s conduct did not violate Sherman Act standards insofar as Otter Tail had ‘asserted a legitimate business interest in keeping its lines free for its own power sales and in refusing to lend a hand in its own demise’. 14

Two more recent cases pointing in opposite directions are *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.* 15 and *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP.* 16 In *Aspen Skiing*, the defendant Ski Co. operated skiing facilities on three of four mountains situated near Aspen, Colorado. The plaintiff Highlands operated a facility on the fourth. The two collaborated for some time in offering ‘All-Aspen’ passes for use on any of the four mountains. In 1978 Ski Co. refused to participate any further in the joint venture or to sell Highlands any lift tickets for Ski Co. facilities. In affirming a jury verdict for Highlands, the Supreme Court, in an opinion by Justice Stevens, stated that while there is no general duty to deal with potential competitors, a monopolist may be liable under § 2 of the Sherman Act if it lacks a legitimate business purpose for its refusal to deal. Significantly, Ski Co. offered no such purpose that the jury was required to credit; indeed, the evidence was consistent with the theory that the defendant stood to lose money in the short run, thus bolstering the inference that it expected to recoup those losses long term by reducing Highlands’s ability to compete. 17 Finally, while the Court declined to pass judgment on the ‘possible relevance of the “essential facilities” doctrine’, 18 a broad reading of this decision along with *Terminal Railroad* and *Associated Press* might lend support to the doctrine in other cases.

*Trinko*, on the other hand, casts a more skeptical eye on efforts to impose § 2 liability for unilateral refusals to deal. The 1996 Telecommunications Act required incumbent local exchange carriers (LECs), such as Verizon, to provide competing LECs with access to, and operations support for the incumbents’ networks. Several competing LECs complained to the
Federal Communications Commission (FCC) and state regulators that Verizon was not filling their orders for operations support in violation of the Telecommunications Act. The FCC and state regulators ordered Verizon to comply. Trinko, a customer of one of the competing LECs, AT&T, then filed a civil action against Verizon alleging that Verizon’s failure to properly fill orders as mandated by the Telecommunications Act impeded competition in the market for local telephone service in violation of Sherman Act § 2. In rejecting this theory, the Supreme Court, in an opinion by Justice Scalia, perceived several problems with imposing an antitrust-based duty to share. Among these was the risk that forced sharing may reduce ex ante incentives to innovate, require courts to regulate price and output in the manner of central planners, and encourage collusion between the monopolist and potential competitors. Characterizing Aspen as standing ‘at or near the outer boundary of § 2 liability’, the Court concluded that, unlike Aspen and Otter Tail, the present case did not involve any prior course of dealing between the monopolist and the allegedly injured competitors; indeed, the duty to share imposed by the Telecommunications Act was ‘something brand new’.19 Nor did Verizon, like Ski Co., forgo any immediate benefits from which one might infer an intent to derive longer-term profits.20 In addition, the Court emphasized that antitrust liability in the present context might provide few benefits in light of the existing regulatory oversight, and it might give rise to substantial error and administrative costs.21 As for the essential facilities doctrine, the Court found ‘no need either to recognize it here or to repudiate it here’, given that the doctrine (assuming it does exist) applies only when access is otherwise unavailable.22 In the present context, the Telecommunications Act already mandated access, and thus a necessary element of the essential facilities doctrine would have been lacking.23

Lower court decisions
Notwithstanding the Supreme Court’s reticence on the matter, several lower court decisions in the United States have endorsed an essential facilities doctrine though they often find one or more of the requisite elements lacking on the facts presented. Hylton cites a 1952 case, Gameco, Inc. v. Providence Fruit & Produce Bldg., Inc.,24 as the first lower court decision to clearly articulate an essential facilities doctrine but notes that the doctrine remained largely dormant until the 1970s.25 Perhaps the most frequently cited listing of the doctrine’s elements today derives from the Seventh Circuit’s opinion in MCI Communications Corp. v. AT&T. The court, affirming a judgment for the antitrust plaintiff, articulated four elements: ‘(1) control of the essential facility by a monopolist; (2) a competitor’s
inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility. With respect to the first two elements, courts have stated that the facility must be ‘essential’ in the sense that denial of access will cause the antitrust plaintiff to incur a severe, long-lasting competitive handicap. At the same time, it ‘need not be indispensable; it is sufficient if duplication of the facility would be economically infeasible and if denial of its use inflicts a severe handicap on potential market entrants’. According to some courts, the third element, denial, requires proof that the defendant denied access on fair and reasonable terms. As for the fourth element, courts continue to cite with approval the DC Circuit’s statement that ‘the antitrust laws do not require that an essential facility be shared if such sharing would be impractical or would inhibit the defendant’s ability to serve its customers adequately’. Proof that the defendant had a legitimate business justification for refusing access will suffice to defeat the claim.

Several decisions also have held that, in addition to the four elements from MCI, a plaintiff must prove that the monopolist uses the facility to control a vertically-related market and the plaintiff is a potential competitor in either the upstream or the downstream market. For example, in Alaska Airlines, Inc. v. United Airlines, Inc., the Ninth Circuit affirmed a judgment for the defendants, stating that a facility is essential only if control of the facility by an upstream monopolist entails the power permanently to eliminate competition in a downstream market. Similarly, the Federal Circuit in Intergraphic Corp. v. Intel Corp., vacated a preliminary injunction in favor of the antitrust plaintiff, holding that a plaintiff asserting an essential facilities claim must prove that it is in competition with the defendant either in ‘the field of the facility itself or in a vertically related market that is controlled by the facility’. According to Pitofsky et al., however, a few courts, including the lower court opinion in Aspen, have recognized the doctrine’s applicability in situations involving only one market instead of two vertically-related markets. In response, Marquardt and Leddy characterize the lower court’s decision in Aspen as an aberration and quote the Areeda/Hovenkamp treatise for the proposition that the ‘doctrine concerns vertical integration – in particular, the duty of a vertically integrated monopolist to share some input in a vertically integrated market . . . with someone operating in an upstream or downstream market . . . ‘.

EC law

Article 82 of the Treaty Establishing the European Community (formerly Article 86 of the EC Treaty) states:
Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States.

Such abuse may, in particular, consist in:

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
(b) limiting production, markets or technical development to the prejudice of consumers;
(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.36

The European Court of Justice (ECJ) first applied this Article in a manner similar to the US essential facilities doctrine in its 1974 decision in Commercial Solvents.37 The defendants, an American company and its Italian subsidiary, dominated the market for aminobutanol, a raw material used in the production of another chemical, ethambutol. The subsidiary also sold and used the finished product within the EC. The ECJ affirmed the European Commission’s finding that there were no other significant sources of, or practical substitutes for aminobutanol.38 The court then affirmed the conclusion that the defendants’ decision to cut off the supply of aminobutanol to a former customer who competed against the Italian subsidiary in the market for ethambutol constituted an abuse of dominant position, stating:

[AN] undertaking being in a dominant position as regards the production of raw material and therefore able to control the supply to manufacturers of derivatives, cannot, just because it decides to start manufacturing these derivatives (in competition with its former customers) act in such a way as to eliminate their competition which in the case in question, would amount to eliminating one of the principal manufacturers of ethambutol in the common market . . . [I]t follows that an undertaking which has a dominant position in the market in raw materials and which, with the object of reserving such raw material for manufacturing its own derivatives, refuses to supply a customer, which is itself a manufacturer of these derivatives, and therefore risks eliminating all competition on the part of this customer, is abusing its dominant position within the meaning of Article 86.39

More recently, EC courts have begun to discuss, and sometimes to apply, the doctrine in cases in which the alleged essential facility consists of intellectual property rights (IPRs). In the first of these cases, AB Volvo v. Erik Veng (UK) Ltd, the plaintiff, Volvo, held a registered industrial design right in the United Kingdom for the front wing automobile body panels
of its ‘200’ series of automobiles.\(^4^0\) Volvo filed suit against the defendant for importing and selling infringing panels within the UK.\(^4^1\) The English High Court referred to the ECJ the question whether it is ‘prima facie an abuse of such dominant position for such a manufacturer to refuse to license others to supply such body panels, even where they are willing to pay a reasonable royalty for all articles sold under the licence’.\(^4^2\) The ECJ held that the mere refusal to license one’s IPRs does not alone constitute an abuse of dominant position, reasoning that ‘the right of the proprietor of a protected design to prevent third parties from manufacturing and selling or importing, without its consent, products incorporating the design constitutes the very subject-matter of his exclusive right’.\(^4^3\) The court cautioned, however, that:

> the exercise of an exclusive right by the proprietor of a registered design in respect of car body panels may be prohibited . . . if it involves, on the part of an undertaking holding a dominant position, certain abusive conduct such as the arbitrary refusal to supply spare parts to independent repairers, the fixing of prices for spare parts at an unfair level or a decision no longer to produce spare parts for a particular model even though many cars of that model are still in circulation.\(^4^4\)

None of these examples of abusive conduct, however, was present in the facts offered to the court.\(^4^5\)

In a subsequent case involving IPRs, the court ruled against the IPR owners. In \textit{RTE and ITP v. Commission (Magill II)}, television broadcasters Radio Telefís Eireann (RTE), ITV and the BBC each published weekly listings of their individual television programming, in which each claimed copyright under Irish law.\(^4^6\) The Commission instituted proceedings after the broadcasters refused to license Magill TV Guide Ltd to publish a comprehensive weekly programming guide that would combine all three broadcasters’ listings.\(^4^7\) Affirming a judgment for the Commission, the ECJ first noted that the ownership of IPRs does not necessarily confer a dominant position, but it concluded nevertheless that the Commission proved that the three broadcasters dominated the market for television listings.\(^4^8\) Second, the ECJ reiterated the holding of \textit{Volvo} that a refusal to deal does not necessarily constitute abuse, but a refusal can constitute abuse in exceptional circumstances.\(^4^9\) Third, the court affirmed the judgment that the broadcasters had abused their dominant position, reasoning that: (1) the Commission had proven indispensability, given that the broadcasters were ‘the only sources of the basic information on programme scheduling which is the indispensable raw material for compiling a weekly television guide’; (2) the broadcasters’ refusal to deal had ‘prevented the appearance of a new product, a comprehensive weekly guide to
television programmes, which the appellants did not offer and for which there was a potential consumer demand’; (3) ‘there was no justification for such refusal either in the activity of television broadcasting or in that of publishing television magazines’; and (4) the broadcasters had ‘reserved to themselves the secondary market of weekly television guides by excluding all competition on that market . . . since they denied access to the basic information which is the raw material indispensable for the compilation of such a guide’. Commentators soon picked up on the ambiguity inherent in the decision, namely, whether all four of these last-mentioned conditions (indispensability, preventing the appearance of a new product for which there is consumer demand, lack of justification, and effects in a secondary or downstream market) need to be satisfied in cases involving IPRs or otherwise, or only some subset thereof.

The next major decision to discuss the essential facilities doctrine was Oskar Bronner GmbH v. Mediaprint. Bronner did not involve IPRs but a distribution service for newspapers. The plaintiff, publisher of a newspaper with a small circulation in Austria, claimed that the defendants, owners and distributors of a much larger newspaper, abused their dominant position by refusing to distribute the plaintiff’s newspaper by means of the defendants’ early morning home-delivery service. On referral from the Austrian court, the ECJ held that Bronner failed to prove that inclusion within the defendants’ distribution network was indispensable given the possibility of (1) other distribution mechanisms ‘such as by post and through sale in shops and at kiosks, even though they may be less advantageous’ or (2) establishing an alternative home-delivery scheme. The plaintiff’s small circulation did not entitle it to any greater entitlement to access than anyone else:

in order to demonstrate that the creation of such a system is not a realistic potential alternative and that access to the existing system is therefore indispensable, it is not enough to argue that it is not economically viable by reason of the small circulation of the daily newspaper or newspapers to be distributed. For such access to be capable of being regarded as indispensable, it would be necessary at the very least to establish . . . that it is not economically viable to create a second home-delivery scheme for the distribution of daily newspapers with a circulation comparable to that of the daily newspapers distributed by the existing scheme.

As Bergman notes, this criterion appears to mean that ‘the doctrine is applicable if a symmetric duopoly with two vertically integrated firms is not economically viable’. The recent decision in IMS Health GmbH v. NDC Health GmbH resolved some of the open questions surrounding abuse of dominant
position. IMS and its German subsidiary marketed a database said to be useful for tracking sales of pharmaceutical products in Germany. A former employee of IMS set up his own competing firm, and IMS sued that firm for infringing IMS’s copyright in the database. The German court referred three questions to the ECJ, among them whether Article 82 should be interpreted to mean that:

- there is abusive conduct by an undertaking with a dominant position on the market where it refuses to grant a licence agreement for the use of a databank protected by copyright to an undertaking which seeks access to the same geographical and product market if . . . potential clients . . . reject any product which does not make use of the databank protected by copyright because their set-up relies on products manufactured on the basis of that databank.

In answering this question, the court attempted to resolve the ambiguity of the *Magill* decision by expressly holding that:

- in order for the refusal by an undertaking which owns a copyright to give access to a product or service indispensable for carrying on a particular business to be treated as abusive, it is sufficient that three cumulative conditions be satisfied, namely, that the refusal is preventing the emergence of a new product for which there is a potential consumer demand, that it is unjustified and such as to exclude any competition on a secondary market.

Elaborating on these conditions, the court stated that in *Bronner*, ‘it was relevant, in order to assess whether the refusal to grant access to a product or a service indispensable for carrying on a particular business activity was an abuse, to distinguish an upstream market . . . and a (secondary) downstream market . . .’. Two markets may be separate, however, even though the dominant firm does not market the relevant products or services separately. Moreover, ‘it is sufficient that a potential market or even hypothetical market can be identified’ and ‘determinative that two different stages of production may be identified and that they are interconnected, inasmuch as the upstream product is indispensable for the supply of the downstream product’. In the case at hand, the court concluded that it would be a matter for the national court to determine whether the database at issue ‘constitutes, upstream, an indispensable factor in the downstream supply of German regional sales data for pharmaceutical products’. The court also stated that conduct would be deemed abusive ‘only where the undertaking which requested the licence does not intend to limit itself essentially to duplicating the goods or services already offered on the secondary market by the owner of the intellectual property right, but intends to produce new goods or services . . . for which there is a potential consumer demand’, and it would be a matter for the national
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court to determine if this condition, as well as the condition relating to justification in light of objective considerations, was satisfied. The court therefore concluded that a firm holding both a dominant position and an IPR in an indispensable database abuses its dominant position by refusing to license another firm when the following conditions are present: (1) the firm that ‘requested the licence intends to offer, on the market for the supply of the data in question, new products or services not offered by the owner of the intellectual property right and for which there is a potential consumer demand’; (2) ‘the refusal is not justified by objective considerations’; and (3) the refusal reserves to the IPR owner the secondary market by excluding all competition in that market.

Even after IMS Health, however, several questions remain. A non-IPR case reflecting a rather broad reading of Article 82 is Attheraces Ltd v. British Horseracing Board Ltd. The plaintiff, Attheraces (ATR), supplies bookmakers with information relating to horseracing. To do so, ATR must obtain pre-race data from the British Horseracing Board (BHB) concerning such matters as the name and time of the race, the names and ages of the horses and so on. Relations between the parties broke down, and ATR filed suit against BHB for withholding the data in violation of Article 82 and related English law. The trial court entered judgment for ATR, reasoning that abuse of dominant position may occur when a seller cuts off an existing customer or refuses to grant access to an essential facility absent a legitimate business justification. Significantly, the trial court held that the essential facilities doctrine could apply even in circumstances, such as were present in the case, in which the upstream seller and the downstream purchaser are not in competition with one another in the downstream market. The Court of Appeal reversed the decision but only on the ground that the evidence did not support the trial court’s finding that the defendants had abused their position by demanding unfair or discriminatory prices for the pre-racing data. The Court of Appeal did not disturb the legal ruling that the essential facilities doctrine may apply even when there is no actual or potential competition between the plaintiff and defendant in the downstream market. As Eagles and Longdin note, in this sense the Attheraces ruling appears to go farther in applying the essential facilities doctrine than any of other cases discussed above.

More recently, the litigation in Microsoft v. Commission afforded the EC Court of First Instance an opportunity to elaborate further on the essential facilities doctrine in the context of software markets. Among the issues presented in this factually complex case was whether Microsoft’s alleged refusal to license ‘interoperability information’ to potential competitors in the market for work group server operating systems amounted to an abuse of its dominant position in the client PC operating systems.
market. In support of its position that Microsoft violated Article 82, the European Commission argued on appeal that the criteria set forth in the preceding line of EC cases do not exhaust the meaning of ‘abuse of dominant position’, but rather, abuses could be found under other circumstances, including those present in the Microsoft case (for example, ‘a refusal to disclose trade secrets that has the effect of ‘technologically tying’ a separate product with a dominant product’).

The Commission also contended that Microsoft’s protocols were not protected by any form of IPRs. The court, proceeding on the assumption that Microsoft’s information was protected by some form of IPRs, reasoned that even under the Magill/IMS Health standards, Microsoft had abused its dominant position. In this regard, the court first reaffirmed that a mere refusal on the part of a dominant party to license its IPRs does not constitute an abuse, but rather that exceptional circumstances must be present.

The court then expounded on the meaning of ‘exceptional circumstances’: (1) ‘the refusal relates to a product or service indispensable to the exercise of a particular activity on a neighbouring market’; (2) ‘the refusal is of such a kind as to exclude any effective competition on that neighbouring market’; and (3) ‘the refusal prevents the appearance of a new product for which there is potential consumer demand’. Exhaustively reviewing the evidence, the court agreed that Microsoft continued to hold a dominant position in the client PC operating systems market; its interoperability information was indispensable to competition in the market for work group server operating systems; a refusal to license the information entailed risk that competition in that downstream market would be eliminated; and Microsoft had indeed refused to license the information. Perhaps more significantly, the court elaborated upon the ‘new product’ element as follows:

The circumstance relating to the appearance of a new product, as envisaged by Magill and IMS Health . . . cannot be the only parameter which determines whether a refusal to license an intellectual property right is capable of causing prejudice to consumers within the meaning of Article 82(b) EC. As that provision states, such prejudice may arise where there is a limitation not only of production or markets, but also of technical development. It was on that last hypothesis that the Commission based its finding in the contested decision. Thus, the Commission considered that Microsoft’s refusal to supply the relevant information limited technical development to the prejudice of consumers . . . The Court finds that the Commission’s findings . . . are not manifestly incorrect.

Finally, the court rejected Microsoft’s argument that its refusal to deal was objectively justified due to the presence of IPRs, noting that the mere presence of IPRs alone is not an objective justification, and that Microsoft had not demonstrated any impairment of its ability to innovate.
Scholarly commentary on the essential facilities doctrine

Scholarly commentary on the essential facilities doctrine is decidedly mixed, with some scholars disapproving of the doctrine in its entirety and others supporting it in varying degrees. An initial problem the critics highlight is that forcing a monopolist to share a facility does not necessarily ensure that consumers will be any better off absent judicial oversight of the resulting prices and output. To illustrate, Areeda and Hovenkamp use a simple example of a monopolist who owns a pipeline that delivers gas to customers; competitive price and output would be $1.00 per unit and 100 units, respectively, whereas the monopoly price and output are $1.50 and 80 units. A court order requiring the monopolist to sell 20 units to the antitrust plaintiff will not alter consumer welfare; the monopolist continues to maximize profits by selling 80 units (20 to the plaintiff, 60 to other buyers) at a price of $1.50. An order requiring the monopolist to sell to the plaintiff at the competitive price would avoid this problem but would give rise to the central-planner or public-utility type of problems noted by Justice Scalia in *Trinko*. Courts may not be well placed to determine competitive price, and to the extent that price may vary over time, courts would need to retain some ongoing supervisory jurisdiction. In a similar vein, Hylton uses an example of a firm with exclusive access to a facility that creates a competitive advantage by reducing the cost of producing some output. Requiring the firm to share access to the facility with a competitor creates an incentive for the two to set output levels no higher than before. The result may simply be a redistribution of monopoly profits or rents between the owner of the facility and the plaintiff rather than a reduction of those profits. Consumers might be better off with a non-colluding competitive fringe that inhibits the monopolist from charging a full monopoly profit.

A second set of problems relates to the potential for the doctrine to give rise to perverse incentives for both the potential monopolist and the potential antitrust plaintiff. For example, suppose that a court requires a monopolist to share a facility at a price below the price the monopolist would otherwise charge for access. The forced sharing reduces deadweight loss and thus increases static efficiency but simultaneously may decrease dynamic efficiency for two reasons. First, decreasing the monopolist’s profit ex post may decrease the ex ante incentive to invest in creating the facility in the first place. The more uncertain the payoff from the investment is initially, the greater the risk of discouraging the investment altogether. To the extent governments confer IPRs precisely to encourage such investments, the application of the essential facilities doctrine to IPRs may seem particularly dubious. Perhaps courts could avoid this problem by ordering access without mandating price, but as noted above,
this solution leaves the monopolist with the option of continuing to sell at the monopoly price. Alternatively, courts could order the defendant to charge a price (greater than marginal cost) that compensates for the defendant’s sunk costs, but this solution only worsens the problem of entrusting courts to function like public utility regulators. A second reason that forced sharing may diminish dynamic efficiency focuses on the effect on the potential antitrust plaintiff. The prospect of obtaining access to the monopolist’s facility reduces the plaintiff’s incentive to invest in developing its own competing facility thus perpetuating the monopolist’s control over the facility and reducing the prospect of future competition. To be sure, this may not be a problem in cases in which courts strictly adhere to the requirement that the facility not be susceptible of duplication by others, but some risk remains that courts will underestimate the feasibility of duplication. Moreover, future competitors may be discouraged from undertaking construction of a facility that, while infeasible before, has become feasible, if they may instead simply access the existing facility. Indeed, one of the many unsettled aspects of the doctrine is determining exactly how onerous the duplication of the facility must be in order for the doctrine to be potentially applicable. As Bergman demonstrates, a criterion that is too strict may reduce social welfare by requiring duplication under circumstances in which the social costs of duplication, including the costs to dynamic efficiency, outweigh the social benefits; at the same time, a criterion that is too lax can pose a serious threat to dynamic efficiency under conditions of uncertainty.

That said, even critics of a broad essential facilities doctrine suggest some circumstances in which the problems noted in the preceding paragraphs might be of lesser consequence or may be counterbalanced by other considerations. First, in cases in which the facility is a high fixed cost, low marginal cost undertaking (that is, it has the characteristics of a natural monopoly), application of the essential facilities doctrine might seem more reasonable than in other circumstances because duplication of the facility would be socially wasteful. However, ex post application of the doctrine in this and other instances may tend to reduce the ex ante incentive to invest in the initial creation of the facility. In such a case, an ex ante competitive bidding process, competing for the market rather than in the market, may be a better solution. Second, if the facility belongs to a regulated monopoly (in which case it may well be a natural monopoly), a shared access rule may prevent the monopolist from evading regulation by charging a monopoly price in a related market. This is Judge Easterbrook’s explanation of the result in Otter Tail. Also, if the facility owner is already subject to some form of price regulation, a judicial decree mandating compliance with such regulation may not entail much
additional ongoing supervision. Similarly, if the bottleneck problem can be solved by mandating access without ongoing supervision, the case for applying the doctrine may be stronger. Third, there may be other instances in which application of the essential facilities doctrine might be a second-best solution. For example, if the government grants to a firm a monopoly over some asset for which there are no good substitutes, and the prospect of new entry is bleak, applying the essential facilities doctrine may increase social welfare by reducing the short-term costs of the monopoly (though, again, only if price is thereafter regulated). Given the government’s initial assistance, the risk of discouraging ex ante investment may be relatively small in such a case. Of course, a first-best solution might be to avoid granting the monopoly in the first place.

Alternatively, in some cases, forced access may enable competitors to survive and prosper long enough to develop their own, competing facilities in the longer term. In this sense, judicious application of the essential facilities doctrine could improve, rather than diminish dynamic efficiency. Areeda and Hovenkamp nevertheless remain skeptical of this rationale for the doctrine, noting both the speculative nature of the benefit to dynamic efficiency and the difficulty of distinguishing cases in which such procompetitive benefits outweigh the potential negative impact on the monopolist’s ex ante incentives. Another recent study however, by Beard et al., is more sanguine, noting that, in theory, forced sharing could either reduce or increase competitors’ incentive to invest in new facilities in the long run, depending upon which effect – the cost saving from substituting the monopolist’s facility for building one’s own versus the expected profitability from new expansion – dominates. Beard et al.’s empirical analysis of the local exchange telecommunications market in the wake of the 1996 Telecommunications Act suggests that some degree of forced sharing actually increased competition by enabling new entrants to gain the foothold necessary to develop their own facilities over time.

If we assume that there are at least some circumstances in which application of an essential facilities doctrine would increase social welfare, the question then becomes how to develop predictable standards for applying the doctrine in such cases and avoiding its application in others. The problem, in other words, becomes the by-now-familiar one of attempting to minimize the sum total of the costs of false positives, false negatives and administrative costs. It is in this regard that we encounter much of the disarray that continues to beset the doctrine. Courts and commentators, unwilling or unable to jettison the doctrine altogether but suspecting that false positives and administrative costs attributable to the doctrine are often likely to be very high, have suggested that the doctrine should apply only when a variety of stringent criteria are met – for example, only
in those bottleneck situations in which an upstream monopolist controls access to a downstream market in which the monopolist also enjoys substantial market power. In such a case, the monopolist’s refusal to deal may eliminate or preclude horizontal competition in either the upstream or downstream market, insofar as it forces would-be competitors to enter both markets simultaneously. If the costs of entry are high enough and the perceived costs to dynamic efficiency tolerable (or on net, negative, as the Beard et al. study suggests may sometimes be the case), judicious application of the doctrine may increase social welfare under such conditions. The only question would be whether an essential facilities doctrine is necessary to achieve this result or whether garden-variety § 2 analysis suffices.

By contrast, courts and commentators less concerned about the potential costs of false positives and administrability, or viewing the risk of false negatives as being of greater concern in some contexts, might do away with many of these restrictive conditions at least in some cases. As noted above, Pitofsky et al. argue that the essential facilities doctrine can play a role even in circumstances in which there is only one relevant product market. To be sure, Pitofsky et al. argue that courts should apply the doctrine only in ‘rare and exceptional circumstances’, but they nevertheless view the doctrine as being potentially applicable whenever a monopolist refuses to make available to a competitor a facility that is both indispensable for competition and incapable of duplication, regardless of whether the competitor is also a customer of the monopolist in some other vertically-related market. So understood, the essential facilities doctrine would become a tool for challenging unilateral refusals to deal that otherwise might not be actionable under Sherman Act § 2 for whatever reason. In a similar vein, Frischmann and Waller argue in a recent paper that courts should deploy the essential facilities doctrine when a monopolist refuses access to certain types of ‘infrastructure’, regardless of the presence or absence of a vertical relationship between the plaintiff and the monopolist. Citing the ‘significant positive externalities . . . that open access produces’, Frischmann and Waller would employ essential facilities more readily in cases in which ‘the facility in question is an input which creates such substantial downstream positive externalities that a regime of open access is socially desirable’. They reason that, in such cases, the social value of open access is high but likely to be undervalued by the user’s willingness to pay because of the user’s inability to appropriate all of the social value flowing from the use, and that, contra Areeda and Hovenkamp, the false positive and administrability risks are manageable. Furthermore, Aoki and Small argue that, in some instances, the social benefits gained from mandating access to certain facilities (such as essential medicines covered by patents) may be sufficiently high as
to justify constraining the monopolist from exploiting its market power either under the essential facilities doctrine or, in the case of facilities such as essential medicines that may involve IPRs, under intellectual property rules permitting the exercise of compulsory licensing. Critics of these more expansive perspectives, such as Marquardt & Leddy and Temple Lang, contend that expanding the doctrine beyond the two-market scenario poses too great a risk of judicial or regulatory abuse.

Applications of the essential facilities doctrine to IPRs are particularly contentious. On one hand, the whole point of much of intellectual property law is to confer exclusive rights that may enable the exercise of monopoly power as an inducement to undertake risky investments in new inventions and works of authorship. To penalize the intellectual property owner ex post for exploiting the exclusivity promised ex ante may, as discussed above, have a negative impact upon dynamic efficiency. This criticism might lead some to agree with Lipsky and Sidak that ‘essential facilities principles are inherently inconsistent with intellectual property protection’ or with Hovenkamp, Janis and Lemley that IPR owners should be subject to antitrust liability for unilateral refusals to deal only in cases in which, inter alia, the owners exercised their rights or attempted to exercise those rights in a manner that goes beyond the scope of the grant (for example, to leverage the rights into control over another market). Most commentators, at the very least, urge extreme caution in applying the essential facilities doctrine to IPRs. Yet others, including myself, argue that although there are likely cases in which the social cost of enforcing IPRs outweighs the social benefits, it is generally preferable for courts to grant necessary relief from within intellectual property law rather than from within antitrust. Potential harm to future innovation may be a cognizable category of injury under US antitrust law, and regulators may consider possible harms to ‘innovation markets’. The practice nevertheless remains controversial largely because of the perceived risk that if antitrust routinely takes into account such relatively speculative harms, the risk of false positives and administrative costs would skyrocket. Intellectual property law, by contrast, has at its disposal several doctrines (such as, in copyright law, the fair use doctrine and the idea/expression dichotomy) that constrain the exercise of IPRs when the risk of anticompetitive harm, while perhaps remote, outweighs the perceived incremental risk to dynamic efficiency. In this regard, it may be notable that in some of the EC decisions discussed above, the property at issue was an IPR appearing to be of questionable validity. The television listings in Magill and the database in IMS were both protected by national copyrights, but arguably neither type of work falls within the core of what most people, even IP scholars, think of when one mentions the term ‘copyright’. To the
extent that courts find sufficient originality in even such mundane works, the tension with competition law may be difficult to resolve. Working to achieve needed reforms from within intellectual property law nevertheless may offer benefits comparable to those promised by the essential facilities doctrine without potentially distorting antitrust law in ways that may have far-reaching, unintended consequences in other contexts.

III Conclusion

The essential facilities doctrine remains controversial, and its precise application even in fora in which it is cognizable remains subject to interpretation. Although intuition may suggest that social benefits will flow from compelling a monopolist to share its property with potential competitors or customers, these benefits may be illusory if the long-run costs to dynamic efficiency are taken into account, if courts are unable to administer the terms and conditions of forced sharing at acceptable cost, or if alternative antitrust causes of action or regulatory remedies are available. Nevertheless, some scholars advance theoretical arguments for the application of the doctrine under certain circumstances, and, at least within the EC, the doctrine now appears to be firmly rooted. The coming years will provide opportunities for courts on both sides of the Atlantic (and elsewhere) to determine just how far, if at all, they are willing to require monopolists to provide access, and just how confident they are in their abilities to strike the right balance for maximizing short- and long-run social welfare.

Notes

1. Briggs and Morgan Professor of Law, University of Minnesota Law School. I thank Philip Kitzer and Nicholas Tymoczko for research assistance.
2. 224 US 383 (1912).
3. Id. at 406–7.
5. See Terminal Railroad, 224 US at 407–9 (stating that the association discriminated against lines making short hauls, or hauling freight eastward through St. Louis as opposed to East St. Louis; and that its practice of rebilling for freight headed westward from East St. Louis through St. Louis served no legitimate purpose).
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facilities’, Brigham Young University Law Review, 1991, 1243–84 (arguing, among other things, that there was no evidence of any actual exclusion in Terminal Railroad).

8. 326 US 1 (1945).


10. See Associated Press, 326 US at 13 (‘Inability to buy news from the largest news agency, or any one of its multitude of members, can have most serious effects on the publication of competitive newspapers’); id. at 45–6 (Roberts, J., dissenting) (decrying the majority opinion as in effect turning the Associated Press into a public utility).


12. Id. at 378.

13. Id. at 375.

14. Id. at 388 (Stewart, J., dissenting).


17. See Aspen Skiing Co., 472 US at 608 (‘The jury may well have concluded that Ski Co. elected to forgo these short-run benefits because it was more interested in reducing competition in the Aspen market over the long run by harming its smaller competitor.’). The short-run benefits referred to were the sales of Ski Co. lift tickets to Highlands, for resale to ski customers, and the honoring of Ski Co. passes issued by Highlands which passes were backed up by an escrow account at a local bank. See id.; see also id. at 610–11.

18. Id. at 611 n. 44.


20. See id. The characterization of Aspen as hinging on the defendant’s forgoing of immediate benefits in the expectation of attaining future returns is however subject to question. As noted above, the ‘short-run benefits’ the Court referred to in Aspen included forgone sales of Ski Co. lift tickets to Highlands – not short-run profits from continued sales of the four-mountain pass. See Aspen, 472 US at 608. In Trinko, the Court interpreted Ski Co.’s forgone short-run benefits as including not only these lost lift ticket sales, but also the ‘voluntary (and thus presumably profitable) course of dealing’ of the entire venture. See Trinko, 540 US at 409 (emphasis in original). As Lopatka and Page note, there is no explicit finding in Aspen that Ski Co. expected to incur short-run losses from terminating its participation in the four-mountain pass venture. See Lopatka, J.E. and W.H. Page (2005), ‘Bargaining and monopolization: in search of the “boundary of Section 2 liability” between Aspen and Trinko’, Antitrust Law Journal, 73 (115), 115–52. By so interpreting Aspen, the Court in Trinko arguably has raised the bar even in a case otherwise identical to Aspen.


22. Id. at 411.

23. See id. at 410-11. Other Supreme Court cases that are sometimes viewed as providing support for an essential facilities doctrine include Lorain Journal Co. v. United States, 342 US 143 (1951) and United States v. Griffith, 334 US 100 (1948).

24. 194 F.2d 484 (1st Cir. 1952).


26. 708 F.2d 1081, 1132–3 (7th Cir. 1983).

27. See, e.g., Alaska Airlines, Inc. v. United Airlines, Inc., 948 F.2d 536, 544 & n.11 (9th Cir. 1991); Twin Labs., Inc. v. Weider Health & Fitness, 900 F.2d 566, 570 (2d Cir. 1990)
(stating that ‘plaintiff must show more than inconvenience, or even some economic loss; he must show that an alternative to the facility is not feasible’). Presumably, as in any case litigated under Sherman Act §2, the plaintiff must also prove that the defendant possesses market power in a properly-defined market. See Alaska Airlines, 948 F.2d at 545 n.12; Hovenkamp, H. et al. (2005), ‘Unilateral refusals to license in the US’, in Shelanski, H. and F. Lévêque (eds), Antitrust, Patents and Copyright: EU and US Perspectives, Cheltenham, UK and Northampton, MA, US: Edward Elgar, pp. 12–55 at 19.

28. See Hecht v. Pro-Football, Inc., 570 F.2d 982, 992 (D.C. Cir. 1977); Jamsports & Enter. LLC v. Paradama Prods., Inc., No. 02 C 2298, 2003 WL 1873563, at *11 (N.D. Ill. Apr. 15, 2003). To be sure, the phrase ‘economically infeasible’ is not exactly a model of precision. See Areeda and Hovencamp (2004), supra note 9, ¶ 773b2, at 201–2 (stating that, ‘[a]lthough essentiality necessarily involves vexing questions of degree, some cases are clear, and it is probably wise to confine any essential facility doctrine to the clear cases’, and suggesting that only facilities that are a natural monopoly, the duplication of which would be illegal, or that have been publicly subsidized can be viewed as essential); Bergman M.A. (2005), ‘When should an incumbent be obliged to share its infrastructure with an entrant under the general competition rules?’, J. Ind. Comp. & Trade, 5(8) (rejecting extreme positions that a facility is indispensable only if it ‘cannot be duplicated in a physical sense’, or if ‘some firm lack[s] the resources to duplicate the facility’, and citing Hecht with approval) (emphasis in original).

29. See Covad Comms. Co. v. BellSouth Corp., 299 F.3d 1272, 1286–7 (11th Cir. 2002) (citing sources), vacated on other grounds, 540 US 1147 (2004); cf. Alaska Airlines, 948 F.2d at 545 n.13 (stating that ‘[w]e do not reach the question of whether at some level, charging a price may be the same as an outright refusal to deal’).


31. See Areeda and Hovencamp (2004), supra note 9, ¶ 773e (collecting cases).

32. Alaska Airlines, 948 F.2d at 544; see also Hovenkamp et al. (2005), supra note 27, at 19 (stating that ‘withholding an essential facility is illegal only if it has the effect of foreclosing competition in the downstream market’).

33. 195 F.3d 1346, 1357 (Fed. Cir. 1999).


35. Marquardt, P.D. and M. Leddy (2003), ‘The essential facilities doctrine and intellectual property rights: a response to Pitofsky, Patterson, and Hooks’, Antitrust Law Journal 70, 847-73 (quoting Areeda and Hovencamp (2004), supra note 9, ¶ 771a). Areeda and Hovencamp also argue that Aspen itself can be viewed as involving two markets, one for promotion of ski services and one for the services themselves: id. at ¶ 772c2, at 186.


38. See id. at ¶ 16.

39. Id. at ¶ 25.


41. See id. at ¶¶ 3, 4.

42. Id. at ¶ 4.

43. Id. at ¶ 8; see also id. at ¶ 11.

44. Id. at ¶ 9.

45. See id. at ¶ 10.


47. See id. at ¶¶ 10–11.

48. See id. at ¶¶ 46–7.

49. See id. at ¶¶ 49–50.
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50. Id. at ¶¶ 54–6.
51. See, e.g., Turney, J. (2005), ‘Defining the limits of the EU essential facilities doctrine on intellectual property rights: the primacy of securing optimal innovation’, Northwestern Journal of Technology and Intellectual Property 1-101 (‘The issue of whether the requirements in Magill were cumulative became one of the most vexed questions in the essential facilities doctrine’).
53. See id. at ¶ 8.
54. See id. at ¶¶ 41–7.
55. Id. at ¶ 45–6.
56. See Bergman, supra note 28, at 8–9.
58. See id. at ¶¶ 4–6; see also Temple Lang, J. (2005), ‘The application of the essential facilities doctrine to intellectual property rights under European competition law’, in Shelslanski, H. and F. Lévêque (eds), Antitrust, Patents and Copyright: EU and US Perspectives, Northampton, MA: Edward Elgar, 56–84 at 69, 70 (explaining the database in greater detail).
60. Id. at ¶ 17. The court noted that the question was ‘based on the premiss, whose validity it is for a national court to ascertain, that the use of the [database] is indispensable in order to allow a potential competitor to have access to the market in which the undertaking which owns the right occupies a dominant position’. Id. at ¶ 22.
61. Id. at ¶ 38.
62. Id. at ¶ 42.
63. See id. at ¶ 43.
64. Id. at ¶¶ 44–5.
65. Id. at ¶¶ 46–7.
66. Id. at ¶¶ 49–51.
67. Id. at ¶ 52.

It remains uncertain, however, even after IMS laid down its own five-point test, whether the criteria are necessarily exhaustive. It is also not clear whether there should be a duty to supply unless the newcomer intended to produce something new (something not offered by the owner of the essential facility for which there is potential consumer demand.) The issue is largely sidestepped in both Advocate General Tizzano’s opinion and the ECJ judgment by the notion that the secondary market identified may be potential or even hypothetical, where, in the words of the ECJ, ‘products or services are indispensable in order to carry out a particular business and where there is an actual demand for them on the part of undertakings which seek to carry on the business for which they are indispensable’.

69. [2007] EWCA Civ 38 (CA). While the case was pending, the ECJ ruled in a separate case that the sort of pre-race data at issue in Atheraces did not qualify for protection under the European Database Directive. See id. at ¶¶ 89–92. 
70. See id. at ¶¶ 32–5. 
71. See id. at ¶ 47.
72. See id. at ¶ 87.
73. See id. at ¶ 108; see also Atheraces Ltd v. British Horseracing Bd. Ltd [2005] EWHC 3015, ¶¶ 247–52 (Ch) (Etherton, J.).
75. See Atheraces Ltd v. British Horseracing Bd. Ltd [2007] EWCA Civ 38, ¶ 281 (CA).
78. See id. at ¶ 36–42.
79. See id. at ¶ 107, 302–9, 313, 316–17.
80. See id. at ¶ 277, 301.
81. See id. at ¶ 289.
82. See id. at ¶ 331.
83. Id. at ¶ 332. The court noted that ‘the circumstance that the refusal prevents the appearance of a new product for which there is potential consumer demand is found only in the case-law on the exercise of an intellectual property right’, id. at ¶ 334, i.e., not in cases such as Bronner.
84. See id. at ¶¶ 436, 561, 620, 766, 854.
85. Id. at ¶ 647–9; see also id. at ¶ 656, 664–5.
86. See id. at ¶ 697, 711.
87. See Areeda & Hovenkamp (2004), supra note 9, ¶ 771b, at 172.
88. See Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 US 398, 408 (2004). (‘Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing – a role for which they are ill suited.’) The English Court of Appeal in Attheraces made similar observations, despite applying the doctrine in that case. See Attheraces, [2007] EWCA Civ 38, ¶ 7 (stating that ‘[t]he nature of these difficult questions suggests that the problems of gaining access to essential facilities and of legal curbs on excessive and discriminatory pricing might, when negotiations between the parties fail, be solved more satisfactorily by arbitration or by a specialist body equipped with appropriate expertise and flexible powers’).
89. See, e.g., Areeda and Hovenkamp (2004), supra note 9, at ¶ 774e; Lipsky and Sidak (1999), supra note 6, at 1223.
90. See Hylton (1991), supra note 7, at 1252. Of course, such collusion itself is unlawful if express, but tacit agreements to collude are not necessarily illegal and can be difficult to detect. A variation on points one and two is that a successive monopoly is worse than a unitary monopoly; forced sharing, however, may facilitate the former. See Fishman v. Estate of Wirtz, 807 F.2d 520, 563 (7th Cir. 1986) (Easterbrook, J., dissenting).
92. See, e.g., Areeda and Hovenkamp (2004), supra note 9, ¶ 773a, at 198; Bergman, supra note 28, at 19–20.
93. See Bergman (2005), supra note 28, at 19–20, 22.
94. See id. at 22; Lipsky & Sidak (1999), supra note 6, at 1219; Temple Lang, supra note 58, at 66–7.
95. See Areeda and Hovenkamp (2004), supra note 9, ¶ 771b, at 172–3.
96. See Bergman (2005), supra note 28, at 22.
97. See Areeda and Hovenkamp (2004), supra note 9, ¶ 771c, at 173.
99. See Areeda and Hovenkamp (2004), supra note 9, ¶ 771c, at 173.
100. See Fishman v. Estate of Wirtz, supra note 90, at 571–4.
102. See Areeda and Hovenkamp (2004), supra note 9, ¶ 773a, at 198 (stating that ‘[p]racticable remedies may be available when divestiture is appropriate, when a regulatory agency exists to control prices, or when nondiscriminatory dealing will solve the problem’).
103. See Hylton (1991), supra note 7, at 1244, 1247, 1262–6, 1283 and n.130 (arguing that, by reducing the returns from investing in acquiring economically unjustifiable government-granted monopolies, such as some patents or copyrights, the essential facilities doctrine may increase social welfare). Of course, the problem, as Hylton notes, is whether courts can distinguish anticompetitive from procompetitive investments. See id. at 1263.
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104. See Bergman (2005), supra note 28, at 22 (noting that the essential facilities doctrine may be easier to justify where the owner of the facility is or was initially a state-owned enterprise less subject to the risks of the marketplace).

105. See Areeda and Hovenkamp (2004), supra note 9, ¶ 771c, at 174.

106. See id. ¶ 771c, at 174; ¶ 773a, at 198. See also Hylton (1991), supra note 7, at 1279–80 (noting that requiring the AP to open its membership to newspapers that competed with existing members might have reduced the potential for collusion by eliminating the risk that a local paper might waive its right to block another local paper’s membership in exchange for an agreement to fix prices, but that this risk must be balanced against the potential harm to incentives due to free-riding); McGowan (2004), supra note 9, at 309–13 (arguing that the result in AP may have contributed to the demise of competitors of AP such as UPI).


108. See id.


110. See Areeda and Hovenkamp (2004), supra note 9, at ¶ 771a; Fishman v. Estate of Wirtz, supra note 90 at 571-3.

111. See Pitofsky et al. (2002), supra note 34, at 458–61.

112. Id. at 461.

113. See id. at 458–61. Marquardt and Leddy hotly contest this understanding of the doctrine, arguing that, contrary to Pitofsky et al., ‘courts have clearly distinguished between cases in which an incumbent exploits its legitimate competitive advantages over direct rivals in the same market and those in which the incumbent tries to leverage its advantages in one market into an adjacent market’, and that ‘[b]y omitting the leveraging element of the essential facilities doctrine, the authors have radically expanded its scope . . .’ Marquardt and Leddy (2003), supra note 35, at 848.

114. As noted in the text above accompanying notes 69–76, the English court’s decision in Attheraces follows a different variation. While deferring to EC case law appearing to require the existence of two markets, the court held that the plaintiff need not prove that the monopolist competes in the second (downstream) market. Instead, the court held the plaintiff must prove only that access to the facility in question is necessary for the plaintiff to compete in that downstream market, and not capable of duplication. Text accompanying notes 69–76.

115. Frischmann, B. and S.W. Waller, ‘Essential facilities, infrastructure, and open access’, available at http://ssrn.com/abstract=942074. Frischmann and Waller define infrastructure as including not only such things as ‘bridges, highways, ports, electrical power grids, and telephone networks’, but also ‘ideas, the Internet, and other assets which are vital inputs to the production of wealth at later stages of production on a basis disproportionate from their actual use’. Id. at 4–5.

116. Id. at 5, 27–8.

117. See id. at 35–40.

118. See Aoki, R. and J. Small (2004), ‘Compulsory licensing of technology and the essential facilities doctrine’, Information, Economics, and Policy, 16, 13–29. Aoki and Small focus most of their analysis, however, on the more conventional application of the essential facilities doctrine, to cases in which the owner ‘is able to extend its power over the input market to another market’, and like many of the other scholars noted above they caution that ‘the threshold tests for compulsory licensing should be sufficiently high to ensure that the resulting static gains are large enough to outweigh . . . dynamic losses’.


120. Most IPRs, of course, do not result in the owner being able to exercise market power.
Relatively few patents or copyrights are ever embodied in marketable products, let alone marketable products for which close substitutes are so scarce as to enable the owner to exercise power over price and output. Given this reality, some scholars find it puzzling that the prospect of gaining market power through investing in invention or authorship would ever motivate anyone to invent or publish. See Scherer, F.M. (2001), ‘The innovation lottery’, in R.C. Dreyfuss et al. (eds), Expanding the Boundaries of Intellectual Property: Innovation Policy for the Knowledge Society, Oxford and New York: Oxford University Press, 3, 19–21.

121. Lipsky & Sidak (1999), supra note 6, at 1219.

122. See Hovenkamp et al. (2005), supra note 27, at 35.

123. See e.g., Temple Lang (2005), supra note 58, at 66–7; but see Ritter, C. (2005), ‘Refusal to deal and ‘essential facilities’: does intellectual property require special deference compared to tangible property?’, World Comp. 28 (arguing that proponents of accord- ing IPRs special deference, including Lipsky & Sidak, Lang and myself, have failed to provide any hard evidence in support of our assertions).


125. See Cotter, T.F. (2006), ‘The procompetitive interest in intellectual property law’, William and Mary Law Review, 48, 483–557. There is no counterpart to the fair use doctrine in patent law, though perhaps there should be, see O’Rourke, M.A. (2000), ‘Toward a doctrine of fair use in patent law’, Columbia Law Review, 100, 1177–249. The exercise of patent law rights can be constrained in part, however, by restrictions on patent scope, see Aoki & Small (2004), supra note 118, and (in some countries, in some rare circumstances) by compulsory licensing for matters of national emergency or by other exceptions to patent rights.

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