Missed Opportunities in *Independent Ink*

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The Supreme Court’s opinion in *Illinois Tool Works Inc. v. Independent Ink, Inc.*\(^1\) is unequivocally good for consumers and eminently sensible. The decision rejects the presumption of antitrust market power in patent tying cases. The presumption is at odds with the longstanding consensus among antitrust scholars,\(^2\) Congress,\(^3\) and the antitrust agencies\(^4\) that patents do not confer antitrust monopoly power. There is virtually no authority defending the proposition, and rightly so. While some have argued that the Court’s previous decisions never created a presumption that patents confer market power, that particular debate is largely academic at this point.\(^5\) The

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\(^2\) See, e.g., 10 Philip E. Areeda et al., Antitrust Law ¶ 1737a (2d ed. 2004); 1 Herbert Hovenkamp et al., IP and Antitrust: An Analysis of Antitrust Principles Applied to Intellectual Property Law § 4.2 (“an intellectual property right does not confer a monopoly”); Richard A. Posner, Antitrust Law 97–98 (2d ed. 2001) (“most patents confer too little monopoly power to be a proper object of antitrust concern”).


\(^4\) See U.S. Department of Justice and Federal Trade Commission, Antitrust Guidelines for the Licensing of Intellectual Property § 2.2 (Apr. 6, 1995) (enforcement agencies will “not presume that a patent, copyright, or trade secret necessarily confers market power upon its owner”).

\(^5\) See, e.g., Brief for the United States as Amicus Curiae Supporting Petitioners at 18–25, *Illinois Tool Works Inc. v. Independent Ink, Inc.*, 126 S. Ct. 1281 (2006) (No. 04-1329); Kevin D. McDonald, Moving Forward While Facing Backward: Illinois Tool Rejects the Presumption of Market Power in Tying Cases, 20(3) Antitrust 33 (Summer 2006), for an exposition of this view. Also unsatisfied with the holding, though for different reasons, McDonald also characterizes *Independent Ink* as an “opportunity lost.” Specifically, McDonald criticizes the decision for failing to provide guidance with respect to the law of tying: “If Justice Stevens had devoted half the time and energy he lavished on defending his own dictum from *Hyde* to explicating the law
presumption has already done its damage. Courts have relied upon its wisdom, casting a shadow of unwarranted litigation risk over the competitive decisions of firms with intellectual property rights.

Justice Stevens’ opinion for the unanimous Court should be applauded for taking an important step towards aligning a perplexing and muddled tying jurisprudence with economic sense and empirical reality. When the well-earned round of applause comes to an end, however, Independent Ink also represents a missed opportunity to clarify antitrust doctrine with respect to competitive conduct that facilitates price discrimination. This essay explores this missed opportunity in greater detail, arguing that while Justice Stevens’ opinion exhibits an undeniable interest in aligning modern antitrust jurisprudence with the consensus view of economists, it does not finish the job. Specifically, the economic logic underlying the Court’s result also supports the conclusion that price discrimination does not imply antitrust market power and, without more, is not an antitrust problem because it does not threaten to reduce consumer welfare in a manner which antitrust policy can improve upon. By failing to endorse the economic logic with which the Court sought to harmonize doctrine, the Court missed a tailor-made opportunity to simultaneously rid antitrust doctrine of a nonsensical presumption and the misguided view that price discrimination is anticompetitive or involves monopoly-type welfare losses associated with the artificial reduction of output.

Part I briefly reviews the Supreme Court’s analysis rejecting the presumption of market power in patent tying cases. Part II relies upon the substantial economic literature analyzing competitive price of tying and how a presumption of market power undermines it, we might have twice the guidance.” id. at 38. See also Kevin D. McDonald, Why the Presumption of Market Power in Patent Tying Cases Never Existed, and Won’t Much Longer, Paper Presented at ABA Section of Antitrust Law Spring Meeting (Feb. 16, 2006).

It is worth noting at the outset of this essay that I do not refer to price discrimination only in the sense prohibited by the Robinson-Patman Act, i.e., the same product sold to different consumers at different prices. Rather, I refer to all forms of price discrimination ranging from coupons and quantity discounts to the practice of charging consumers “effectively” different prices relative to marginal cost. For instance, in the classic example of the tied sale of razor blades to the razor, where the seller lowers the price of the razor and increases the price of the blades, high intensity users pay a higher price for the package relative to marginal cost. While the economic insights regarding price discrimination in Part II apply to all forms of price discrimination, Robinson-Patman liability is outside the scope of this essay.

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discrimination and builds the foundation for the primary claim of this essay set forth in Part III: a consumer welfare-oriented antitrust regime should ignore competitive conduct facilitating price discrimination unless it is independently capable of causing competitive harm. To be sure, such conduct would not enjoy absolute immunity from antitrust enforcement. For example, a tying arrangement or refusal to deal might raise barriers to entry and cause an anticompetitive effect by allowing a dominant firm to maintain its monopoly. The economic point is that this harm has nothing to do with price discrimination, and conflating price discrimination with monopolistic exclusion threatens to deter a substantial amount of procompetitive conduct.

I. Illinois Tool Works Inc. v. Independent Ink, Inc.

Independent Ink involves a classic example of a metering tie. A subsidiary of Illinois Tool Works, the Trident division, manufactures a patented printhead to print bar codes on product cartons. Trident licenses its patented printheads to original equipment manufacturers on the condition that they purchase non-patented ink from Illinois Tool. Independent Ink, Inc., is a rival distributor and supplier of ink and ink products and brought suit alleging that Illinois Tool Works engaged in an unlawful tying arrangement in violation of section 1 of the Sherman Act and monopolization under section 2 of the Sherman Act.\(^7\)

The district court granted Illinois Tool’s motion for summary judgment on all antitrust claims because there was no allegation of market power in the sale of the “tying” good and no evidence of actual market power.\(^8\) The Federal Circuit reversed with respect to the section 1 claims, holding that “where the tying product is patented or copyrighted, market power may be presumed rather than proven.”\(^9\)

The Supreme Court granted certiorari to “undertake a fresh examination of the history of both the judicial and legislative appraisals of tying arrangements . . . informed by extensive scholarly comment and a change in position by the administrative agencies charged with enforcement of the antitrust laws.”\(^10\) The Court framed the

\(^7\)126 S. Ct. at 1284–85.


\(^9\)396 F.3d 1342, 1348 (Fed. Cir. 2005). The Federal Circuit argued that the presumption was required under prior Supreme Court precedent. Id. at 1348–49 (“International Salt and Loew’s make clear that the necessary market power to establish a section 1 violation is presumed.”).

\(^10\)126 S. Ct. at 1285.
issue presented as “whether the presumption of market power in a patented product should survive as a matter of antitrust law despite its demise in patent law.”  

Justice Stevens’ opinion is largely devoted to identifying the origin of the presumption in a case about patent misuse, Motion Picture Patents Co. v. Universal Film Manufacturing Co., 12 and arguing that the presumption “migrated” from patent law to antitrust law in International Salt Co. v. United States, 13 upon urging from the United States that tying arrangements involving patented products were indeed per se violations of the Sherman Act. Having identified the source of the presumption’s migration into antitrust jurisprudence, the Court noted that in 1988 Congress had eliminated the presumption in the same patent misuse context 14 before concluding that “it would be anomalous to preserve the presumption in antitrust after Congress has eliminated its foundation.” 15

The Court’s conclusion that plaintiffs must demonstrate proof of market power in patent tying cases is not surprising in light of the overwhelming and virtually undisputed weight of authority against the presumption. There are, however, two particularly notable aspects of the opinion worth addressing before turning to the larger issue of the antitrust analytics of price discrimination.

The first is that the Court rejected a more subtle version of the argument that patents confer market power raised by Independent Ink with the help of Professors Barry Nalebuff, Ian Ayres, and Lawrence Sullivan (“Nalebuff”) as amici. 16 The Nalebuff argument claims that an alternative and more narrowly tailored presumption, found in neither patent nor antitrust cases, remained appropriate despite the weight of scholarly commentary to the contrary. Specifically, Nalebuff argues that the presumption of market power remains appropriate for metering arrangements or “requirements ties,” i.e., those tying arrangements involving a patented tying good and the purchase of unpatented goods over a period of time, because they

11Id. at 1284.
12243 U.S. 502 (1917).
15126 S. Ct. at 1291.
allow the patent holder to charge different prices to heavy and light users of the unpatented good. Economists generally refer to tying arrangements that require the purchase of a complementary good as "metering ties," because they allow the seller to charge lower package prices to those who use the product less intensely and, conversely, higher package prices relative to costs for high intensity users. Examples of "metering" are common in the modern economy: computers and punch cards, razors and razor blades, video game consoles and video games, and, of course, printers and ink.

Nalebuff argues that this sort of price discrimination associated with metering "is strong evidence of market power." It is not. I will address the flaws in the economics of this argument in Part II. Ultimately, the Court properly rejects this argument, but solely on the grounds that the legal foundation for the antitrust presumption, International Salt, did not rely on the use of a requirements tie in presuming market power. This legal response is technically correct. Indeed, International Salt applied no presumption and there was no argument that the defendant actually possessed market power. However, Justice Stevens’ doctrinalist response is particularly disappointing in light of the second notable characteristic of the opinion: a not-so-subtle desire to align tying jurisprudence with the economic literature.

Justice Stevens’ opinion repeatedly informs us that the Court’s analysis is consistent with both scholarly commentary and the consensus view of economists. In rejecting the logic behind the presumption, the Court notes that "[o]ur imposition of this requirement accords with the vast majority of academic literature on the subject," and that "the vast majority of academic literature recognizes that a patent does not necessarily confer market power." The Court also appeals to the growing economic literature recognizing that price discrimination of the type associated with metering ties occurs in fully competitive markets and correctly notes that neither price discrimination nor supracompetitive package pricing are sufficient

17 Id. at 27.
18 126 S. Ct. at 1292.
20 Id. at 1292.
conditions for antitrust market power.\textsuperscript{21} Finally, the passage that most clearly signals the Court’s desire to align tying jurisprudence with economic analysis appears toward the end of the opinion:

Congress, the antitrust enforcement agencies, and most economists have all reached the conclusion that a patent does not necessarily confer market power upon the patentee. Today, we reach the same conclusion, and therefore hold that, in all cases involving a tying arrangement, the plaintiff must prove that the defendant has market power in the tying product.\textsuperscript{22}

The Court was undoubtedly sincere regarding its desire to incorporate the consensus view of economists and scholars into tying jurisprudence. This effort was largely successful and it is worth taking a moment to congratulate the Court for reaching a proconsumer result supported by both economic logic and principles of sound antitrust policy. Virtually all antitrust and intellectual property scholars view the presumption as unequivocally misguided both in theory\textsuperscript{23} and as an empirical matter.\textsuperscript{24} The presumption improperly

\textsuperscript{21}Id. (citing William J. Baumol & Daniel G. Swanson, The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power, 70 Antitrust L.J. 661, 666 (2003); 9 Areeda et al., supra note 2, at ¶ 1711; Landes & Posner, supra note 19, at 374–75).

\textsuperscript{22}Id. at 1293.

\textsuperscript{23}To my knowledge, there is no single legal or scholarly authority defending the presumption on theoretical grounds. An exchange between Kathleen Sullivan, on behalf of the respondent, and the Court is telling:

Ms. Sullivan: The patent presumption, not a rule, is a sensible rule of thumb for capturing the wisdom that patents used to enforce requirements ties are more likely than not to show market power. That’s what they’re intended to do through barriers to entry, and that’s what they have done. In fact, the petitioners and Government have been able—unable to show a single procompetitive tie.

Chief Justice Roberts: Are you conceding that the presumption makes no sense outside of the requirements metering context?

Ms. Sullivan: Mr. Chief Justice there could be a sensible argument that you should always presume requirements ties to indicate market power. That’s not the law, and we don’t urge it here . . . .

Justice Stevens: I’m kind of curious what your answer is to the Chief Justice’s question.

(Laughter).


\textsuperscript{24}See, e.g., F.M. Scherer, The Value of Patents and Other Legally Protected Commercial Rights Panel Discussion (1984), in 53 Antitrust L.J. 535, 547 (1985) (“studies
shifted a substantial burden to antitrust defendants without the power to impact market conditions, thus chilling welfare enhancing competition.\textsuperscript{25}

If the opinion’s goal was to harmonize tying jurisprudence with the economic literature and empirical reality, however, the success was both undeniable and incomplete. While the Court reached a sound result from an economic perspective, the Court avoided use of economic logic in reaching its holding, relying instead solely upon analysis of prior precedent and changes in patent law.\textsuperscript{26} This choice is not without its costs. Most significantly, by failing to expressly adopt the economic principles underlying its holding, the Court missed an opportunity to clarify antitrust policy in an area of growing importance: competitive price discrimination.\textsuperscript{27} Importantly, the economic consensus referenced by the Court supports the rejection of the presumption precisely because it rejects the notion that price discrimination implies antitrust market power. That is, the ability to price discriminate simply does not imply the ability to influence market prices or conditions.

\section*{II. The Economics of Competitive Price Discrimination}

Price discrimination involves a firm taking advantage of different elasticities of demand for the same goods by charging different prices relative to marginal cost.\textsuperscript{28} Demand elasticities may vary for similar goods across several different margins. For instance, interpersonal price discrimination involves different prices charged to different

suggest that the vast majority of all patents confer very little monopoly power’’); John R. Allison et al., Valuable Patents, 92 Geo. L.J. 435, 437 (2004).

\textsuperscript{25}Chief Justice Roberts and Justice Kennedy recognized this effect of the presumption at oral argument despite attempts to frame the impact of the presumption as de minimis because it was simply a rebuttable presumption with respect to a single element of a tying claim. Transcript of Oral Argument, \textit{supra} note 23, at 34–36.

\textsuperscript{26}The Court’s analysis places considerable weight on the changes in patent law, framing the issue before the court as whether the presumption “should survive as a matter of antitrust law despite its demise in patent law.” 126 S. Ct. at 1284.

\textsuperscript{27}For instance, the \textit{Antitrust Law Journal} recently dedicated a symposium issue to this topic. See 70 Antitrust L.J. 593 (2003).

consumers, whereas intrapersonal price discrimination involves different prices on units sold to the same consumer, such as a quantity discount.

There are other ways to classify forms of price discrimination. Most students of economics are no doubt familiar with Pigou’s classification of price discrimination into “degrees.”29 Under third-degree discrimination, customers are segmented according to these differing demand elasticities and each group is charged a single profit-maximizing price. Second degree discrimination, by contrast, involves a single profit maximizing price which varies by elasticity. First degree price discrimination, which Pigou argued (along with second degree discrimination) was rarely if ever observed in the real world,30 involves the manufacturer varying the price to each consumer in order to extract the maximum surplus.

Price discrimination, especially of the second- and third-degree variety, is extremely common in real world markets characterized by intense competition. Despite its ubiquity in competitive product markets of all varieties, price discrimination has proven a particularly stubborn problem for antitrust. The problem involves a number of fundamental questions. Does price discrimination imply market power? Does it imply antitrust monopoly power? What is the difference between the two, if any? Does price discrimination in competitive markets harm consumers? Each of these questions must be answered in order to design a sensible antitrust response to competitive price discrimination. Recent analyses of price discrimination by economists and antitrust scholars provide the answers.31 This

29A.C. Pigou, The Economics of Welfare (1920).
30Id. at 244.
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burgeoning economic literature sets the foundation for the policy claims in Part III by dispelling some commonly invoked myths about price discrimination. Specifically, this literature demonstrates that the power to discriminate does not derive from market power as the term is used in antitrust law, that economists and antitrust law do indeed mean something different by “market power,” that recent attempts to reconcile this tension are not useful, and that competitive price discrimination does not generally involve pernicious welfare effects.

A. Price Discrimination Requires Only the Absence of Perfect Substitutes

Competitive price discrimination will occur wherever product differentiation exists since all that is required for a firm to have the potential to charge differential prices is the absence of perfect substitutes deriving from any source.\(^{32}\) Real world markets are characterized by exactly such product differentiation. Firms sell products with unique characteristics, whether the source of that uniqueness derives from a protected trademark, locational advantages, taste, packaging, quality, or any number of seller- or customer-specific factors.\(^{33}\)

The important economic point is that price differentials can be expected to persist in equilibrium in competitive markets characterized by differentiated products. A leading treatise of the economics of price discrimination explains that a sufficient condition for price discrimination without long run market power is “some short run source of market power that allows prices to remain above marginal cost, such as a fixed cost of production.”\(^{34}\) Any source of customer brand-specific preference is sufficient to enable the firm to price discriminate.

A comparison with the model of perfect competition is useful to illustrate this point. Under perfect competition, all firms face perfectly elastic demands and therefore any deviation from marginal

\(^{32}\)See Stole, \textit{supra} note 31, at 1 n.2.

\(^{33}\)See Timothy J. Muris, Improving the Economic Foundations of Competition Policy, 12 Geo. Mason L. Rev. 1, 28 (2003) (“Most real world markets, even those for relatively ‘homogenous’ products and a market structure inconsistent with significant market power, exhibit significant price variation. These price differences do not prove that the firms have market power.”).

\(^{34}\)Stole, \textit{supra} note 31, at 1 n.2.
cost pricing causes demand to fall to zero. The reason why the firm in the perfectly competitive market of textbooks does not have this power is because the model assumes that all products are homogeneous. Therefore, any attempted deviation from marginal cost pricing, even by one penny, will result in a loss of sales to rival firms offering perfect substitutes. Obviously, this assumption does not correspond with the real world, where firms compete by offering imperfect substitutes, products that are somewhat unique and differentiated across a wide spectrum of characteristics. Each of these firms, and virtually all in the economy, has the ability to charge prices above marginal cost because they offer unique products.

B. Economists Define Market Power as the Ability to Set Price Above Marginal Cost Because They Use Perfect Competition as a Competitive Benchmark

Price discrimination implies market power for economists because it involves some sales above marginal cost. In fact, above marginal cost pricing is the standard definition for market power in economics textbooks, which measures a firm’s market power by its own-elasticity of demand.\(^{35}\) This definition of market power explicitly adopts the perfectly competitive model as the competitive benchmark. In this world, firms cannot price discriminate because they face a perfectly horizontal demand. In real world markets, however, products can be expected to be differentiated on some margin. Some consumers will prefer the taste of Coca-Cola over Pepsi, or to drive to the gas station nearest the freeway entrance rather than to other locations, or to purchase groceries from a supermarket with a reputation for high quality produce. When a firm offering a differentiated product increases its price, sales will decrease, but not fall to zero. Once we allow for the reality of product differentiation between competitive firms, the model of perfect competition no longer applies. The perfectly competitive model is rendered inapplicable as a useful benchmark for antitrust analysis since virtually each seller in a real world market has the ability to price discriminate.

\(^{35}\)Own-price elasticity of demand refers to the responsiveness of quantity demanded as a function of a change in price. Dennis W. Carlton & Jeffrey M. Perloff, Modern Industrial Organization 610 (3d ed. 2000) ("A firm . . . has market power if it is profitably able to charge a price above that which would prevail under competition, which is usually taken to be marginal cost.").
C. Market Power in Economics is Fundamentally Different than Market Power in Antitrust Law

Benjamin Klein and John Wiley persuasively argue that market power in economics (the ability to price discriminate or price above marginal cost) is a phenomenon distinct from market power in antitrust, though antitrust law sometimes conflates the two by adopting an own-elasticity of demand definition of market power. Klein and Wiley carefully document this confusion and diagnose the root cause as the mistaken view that market power in economics is the same phenomenon as market power in antitrust law. It is not.

Market power in economics derives from the ability to deviate from marginal cost pricing, a power that comes from any source of product differentiation, i.e., a trademark, reputation, relationship with buyers, taste, or location. The monopoly power required to trigger a violation of the antitrust laws refers to a different sort of power—the power to control market prices. Klein and Wiley demonstrate that, contrary to the classic analysis by Landes and Posner, antitrust law should, and generally does, define market power, though sometimes ambiguously, in terms of the ability of a firm to influence market conditions rather than focusing on the firm’s own-elasticity of demand.

A commonly cited and relied upon definition of market power in antitrust law, adopted by the Supreme Court in Jefferson Parish, is that “market power exists whenever prices can be raised above levels that would be charged in a competitive market.” Market power under the antitrust law is therefore only identical to market power in economics if the case law can reasonably be understood as endorsing the view that prices charged in competitive markets are always equal to marginal cost, as would prevail under perfect

36Klein & Wiley, supra note 31, at 624–33.
37Id. at 624–29 (citing prominent antitrust scholars such as Phillip Areeda, Donald Turner, Robert Bork, Richard Posner, and Lawrence Sullivan as endorsing the proposition that the ability of a firm to price discriminate is evidence of significant monopoly power).
competition. 41 As Klein and Wiley point out, it is difficult to reconcile this view with the language from the Cellophane case rejecting the notion that a firm’s ability to control its own prices resulting from product differentiation determines whether it has market power:

[O]ne can theorize that we have monopolistic competition in every nonstandardized commodity with each manufacturer having power over the price and production of his own product. However, this power that, let us say, automobile or soft-drink manufacturers have over their trademarked products is not the power that makes an illegal monopoly. Illegal power must be appraised in terms of the competitive market for the product. 42

It is clear that the definition of market power for the purposes of antitrust law is the ability to influence market prices and output, a power that is not usefully defined as a function of the firm’s own-elasticity of demand. The question of antitrust market power is one of selecting an appropriate competitive benchmark to compare current market conditions. A firm’s ability to price discriminate, and therefore its own-elasticity of demand, is only suggestive of antitrust market power if the competitive benchmark is perfect competition, which would require a finding that antitrust market power exists in virtually every firm in our modern economy characterized by competition between firms offering differentiated products.

One obvious exception to the “market conditions-based” definition of antitrust market power derives from the Supreme Court’s analysis in Eastman Kodak Co. v. Image Technical Services. 43 While Kodak acknowledges that antitrust market power has been defined as “the ability of a single seller to raise price and restrict output,” the definition adopted in Jefferson Parish, the Court ultimately adopts a strikingly different “consumer lock-in” conception of antitrust market power. 44 This definition allows for post-contractual evaluation of antitrust market power rather than analyzing the choices

42Id. at 630 (citing United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 393 (1956)).
available to the buyer at the time of the relevant decision. This “lock-in” definition allows for antitrust market power to be found, at least under some conditions, in a single seller’s brand, independent of firm market share and control over market conditions. The power to hold up “locked-in” consumers in proprietary aftermarkets is no different than the power a landlord has over a tenant after a competitive lease arrangement is signed.45 While Kodak’s alternative “lock-in” definition of market power is the exception rather than the rule in antitrust analysis, and has been limited to certain aftermarket tying cases, it would be inaccurate to suggest that the “market conditions-based” definition of market power is applied universally.

D. Price Discrimination Does Not Imply Antitrust Market Power—Not Even a Little Bit of Market Power

Antitrust scholars recognizing that the ability to price discriminate does not necessarily imply antitrust market power have sensibly attempted to reconcile the own-price elasticity definition of market power with the reality that most firms in our economy wield this power without the ability to influence market conditions. While these efforts are commendable, they have resulted in increased confusion regarding the role of antitrust in governing competitive price discrimination. The most commonly invoked attempt to reconcile economic market power with antitrust market power is the claim that price discrimination implies economic market power, but not to a degree sufficient to create antitrust market power.46 That is, the

45The landlord and tenant example, and an antitrust analysis of aftermarket tying arrangements, appears in Benjamin Klein, Market Power in Antitrust: Economic Analysis After Kodak, 3 S. Ct. Econ. Rev. 43 (1993).

46A second attempt to reconcile the own-price elasticity definition of market power with antitrust law is to add the caveat that price discrimination implies market power only in markets with entry barriers. See generally Jonathan B. Baker, Competitive Price Discrimination: The Exercise of Market Power Without Anticompetitive Effects (Comment on Klein and Wiley), 70 Antitrust L.J. 643 (2003). Baker adopts the view that while price discrimination always proves market power, such power can be exercised without anticompetitive effects in markets with free entry. Klein and Wiley persuasively respond that in many industries characterized by brand names and intellectual property, entry is not likely to be free, but it is generally accepted that the presence of these assets does not imply the existence of market power. Benjamin Klein & John S. Wiley, Market Power in Economics and in Antitrust: Reply to Baker, 70 Antitrust L.J. 655, 656–57 (2003).
two phenomena are distinguished by a matter of degree and not kind. For instance, the 2002 edition of a leading treatise states:

Proving price discrimination in selling or leasing identical (or nearly identical) products can usefully show the existence of market power if cost differences (or their absence) are readily determinable. But price discrimination seldom shows the amount of market power, and many instances of price discrimination are quite consistent with robust but imperfect competition. As a result, price discrimination evidence has very limited utility for proving power.47

No less an antitrust luminary than Judge Richard Posner adopts this reconciliation of the legal and economic definitions of market power. While conceding on the one hand that it would be “a profound mistake” to conclude that every firm facing a downward sloping demand curve has monopoly power in the sense meant by antitrust laws, Posner argues that this is only because these firms face “almost horizontal” demand curves.48 Klein and Wiley correctly point out that Posner reaches the right result for the wrong reasons by adopting the unrealistic model of perfect competition as a benchmark.49

A downward sloping demand curve, the demand facing a firm whose rivals offer imperfect substitutes, does not imply antitrust market power. Nor does this power, which enables the firm to price discriminate, imply a level of antitrust market power “too small” to be concerned with for antitrust purposes. Economic market power and the monopoly power that is the concern of the antitrust laws are separate and distinct phenomena. What of Judge Posner’s argument that firms which have the power to price discriminate do not have antitrust market power only if they face “almost horizontal” demand? A firm with trivial market share and the ability to price discriminate may well face significantly inelastic demand if its unique characteristics appeal strongly to a small set of buyers.

472A Phillip E. Areeda et al., Antitrust Law ¶ 517, at 127–28 (2d ed. 2002); see also Landes & Posner, supra note 38, at 939 (“A simple economic meaning of the term ‘market power’ is the ability to set price above marginal cost . . . . But the fact of market power must be distinguished from the amount of market power.”).

48Richard A. Posner, Antitrust Law 83 (2d ed. 2001); see also In re Brand Name Prescription Drugs Antitrust Litigation, 186 F.3d 781, 786–87 (7th Cir. 1999).

Consider the market for the sale of men’s colognes. Colognes are differentiated across a number of dimensions: brand names, smell, look, packaging, and others. “Michael Jordan Cologne for Men,” for example, likely faces a significantly downward sloping demand curve and charges a price significantly above the marginal cost of producing the cologne, but has a trivial share of the total market for men’s colognes. The seller of the Michael Jordan brand cologne undoubtedly has the power to engage in price discrimination, for example by offering quantity discounts or coupons. Loyal fans of Michael Jordan may constitute a very small fraction of the men’s cologne market but be very loyal to the brand because of an affinity for the former basketball superstar. Michael Jordan brand cologne is of no antitrust concern because it does not have the ability to influence market conditions, not because it faces an “almost horizontal” demand curve.

Conversely, one might imagine a hypothetical cologne monopolist with 95% share facing more elastic demand than Michael Jordan Men’s Cologne because consumers are attracted to the characteristics of the product but are not as fiercely brand-loyal as Michael Jordan’s fans. Both firms have the ability to price discriminate, but only the firm with the more elastic demand might possibly possess control over market conditions. One simply cannot rank the degree of antitrust market power according to a firm’s elasticity of demand. The fundamental economic point is that the ability to price discriminate is not evidence of some “degree” of influence over market conditions. Indeed, the ability to price discriminate is irrelevant to the power to control market conditions that is the raison d’être of modern antitrust.

The same analysis applies to the presence of a patent, such as the one held by Illinois Tool Works. Rather than conferring market power, a patent merely allows a firm to exclude competitors from selling identical products. Patents do not ensure that the firm does not compete against a significant number of substitutes, but guarantee that those substitutes will be imperfect.\(^5\) In other words, a patent

\(^5\)Justice O’Connor makes this distinction, joined by three other concurring justices, in *Jefferson Parish*, 466 U.S. 2, 37 n.7 (1984) (“A common misconception has been that a patent or copyright, a high market share, or a unique product that competitors are not able to offer suffice to demonstrate market power. While each of these three factors might help to give market power to a seller, it is also possible that a seller in these situations will have no market power: for example, a patent holder has no market power in any relevant sense if there are close substitutes for the patented product.”). Accord 1 Hovenkamp et al., *supra* note 2, § 4.2, at 4–9 (“a patent grant
guarantees merely that the firm, like virtually all others in the economy, will face a downward sloping demand since rivals will be unable to duplicate the product in the marketplace for some fixed period of time. The patented product may garner a small share of the market but have an intensely loyal following and thus face highly inelastic demand. Alternatively, the patented product may succeed in obtaining a dominant market share but face competition from an imperfect substitute with a more loyal following consisting of less price sensitive customers. The patent wielding monopolist will face more elastic demand despite greater control over market conditions. For the same reason that patents do not confer antitrust market power, neither does the power to price discriminate, since both derive from the same source: the lack of perfect substitutes.

E. Price Discrimination Does Not Generally Involve Pernicious Welfare Effects

The conventional mantra for those advocating strict antitrust scrutiny of price discrimination is the well-known economic analysis which concludes that the total welfare effects of third-degree price discrimination are ambiguous. From a static perspective, this analysis makes some intuitive sense: some buyers receive lower prices (and purchase higher quantities) while other buyers receive higher prices (and purchase lower quantities) and therefore the net impact of price discrimination on output is ambiguous. Indeed, standard models of price discrimination in the economic literature demonstrate that an increase in aggregate output is a necessary condition for price discrimination to increase welfare under monopoly.51 This conventional welfare analysis is of limited utility for several reasons.

The first is because most aftermarket metering agreements do not involve what Pigou classified as third-degree price discrimination. Recall that third-degree price discrimination refers to the practice of breaking buyers into distinct groups and setting a profit maximizing price for each group, resulting in one price for each group. But

aftermarket metering arrangements, like those involved in *Independent Ink*, do not involve third-degree price discrimination. Rather, Illinois Tool Works’ arrangement involved a single price for printers and ink which allowed it to vary the total package price across each unit sold to each buyer according to the intensity of use in an attempt to capture the maximum surplus. Klein and Wiley point out that aftermarket metering arrangements, the most common example of price discrimination in antitrust analysis, are much more appropriately described as second-degree price discrimination.\(^52\)

A comparison to “perfect” or first-degree price discrimination is useful. Perfect price discrimination refers to the ability of a seller to vary the price across each unit to each consumer in order to extract all consumer surplus. It is well known that perfect price discrimination generates outcomes where industry output is identical to that which would prevail under perfect competition, where price equals marginal cost. Second-degree price discrimination in the metering context is therefore an approximate form of perfect price discrimination. So why do Klein and Wiley contend that aftermarket metering falls into this category rather than the “welfare-ambiguous” class of third-degree discriminatory arrangements? The answer is because aftermarket metering, like perfect price discrimination, involves an attempt to collect the maximum for each unit sold to each buyer by metering the intensity of the package demand. High intensity users pay a higher package price and lower intensity users pay a lower package price, with the seller collecting varying levels of consumer surplus from each type of user. Klein and Wiley describe the relationship the following way:

> The essential economic determinant of how closely a manufacturer using an aftermarket metering arrangement can approximate the output increases of perfect price discrimination is the accuracy of the meter in measuring intensity of package demand above the non-discriminating price.\(^33\)

The welfare effects of perfect price discrimination are unambiguous from a static perspective: producer surplus and output increase while consumer surplus decreases. The more surplus the seller is


\(^33\)Id. at 613.
able to extract with the metering device, the greater the output increasing effect of the discriminatory arrangement.

The second failure of the conventional welfare analysis is that it ignores important dynamic welfare effects that are unambiguously welfare increasing. The increase in producer surplus predicted by the conventional price discrimination analysis provides incentives for additional investment in innovation and other competitive investments such as increasing product variety, expanding retail outlets, or research and development. Klein and Wiley summarize the static and dynamic welfare effects of aftermarket metering arrangements as likely to enhance efficiency. Investments made to enhance the ability to price discriminate are not socially wasteful, rent-dissipating expenditures. Rather, these investments are best seen as part of the competitive process as firms attempt to attract consumers through offering valuable products, services, and amenities.

Finally, the conventional welfare analysis ignores the possibility that price discrimination intensifies competition and therefore increases consumer welfare for all consumers. Recent models analyze the competition-intensifying impact of price discrimination and challenge the result that price discrimination necessarily involves losses to some consumers. The economic intuition behind these models is that price discrimination is a competitive tool that allows firms to compete for all consumers on different segments of the demand curve by offering a menu of prices rather than competing only for the marginal consumer with uniform pricing. Competitive price discrimination therefore leads to lower profits and lower prices. Thus, an examination of these static welfare effects suggests that third-degree price discrimination is at least welfare neutral relative to uniform pricing.

Economics provides no single universal welfare theorem for all arrangements involving price discrimination. It is certainly true

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54 Id. at 619.
55 See, e.g., Corts, supra note 31.
56 There is another important dimension upon which welfare results might vary in addition to those already mentioned. The economics literature distinguishes between price discrimination to final consumers as opposed to intermediate buyers. In the former, it has been shown that nonlinear pricing schedules may be welfare superior to uniform pricing under general conditions. See, e.g., Robert D. Willig, Pareto-Superior Nonlinear Outlay Schedules, 9 Bell J. Econ. 36 (1978). However, these welfare results do not necessarily apply to intermediate goods market. See, e.g., Michael
that some consumers are worse off under some discriminatory arrangements, and that sometimes those losses will outweigh the gains to other consumers. However, even an analysis of the static welfare effects of competitive price discrimination can involve benefits to all consumers. Because the standard welfare analysis ignores important dynamic effects as well as the possibility that the practice intensifies competition generally, and both effects unambiguously increase consumer welfare, consumers are likely to benefit from the practice.

Even if some discriminatory arrangements theoretically involve a net welfare loss, it is necessary to distinguish these welfare losses from those caused by an artificial reduction in output. As discussed in Part III, antitrust policy should distinguish between welfare losses associated with competitive attempts to increase output by attracting consumers and monopolistic attempts to reduce market output.

F. A Reply to Nalebuff, Ayres, and Sullivan: Metering Ties Facilitating Price Discrimination Are Not Evidence of Market Power

Independent Ink and its amici curiae, Professors Barry Nalebuff, Ian Ayres, and Lawrence Sullivan, argued that the presumption was appropriate for metering ties because they involve price discrimination that “is strong evidence of market power.” As discussed, the Court rejected this argument largely on legal grounds. However, the Court did not ignore the economic merits of the Nalebuff brief altogether, noting that it was “not persuaded that the combination of [price discrimination and an above-market price for the tied package]...
should give rise to a presumption of market power when neither is sufficient to do so standing alone.\textsuperscript{57} The Court adopts the view that:

\begin{quote}
[W]hile price discrimination may provide evidence of market power, particularly if buttressed by evidence that the patentee has charged an above-market price for the tied package, it is generally recognized that it also occurs in fully competitive markets.\textsuperscript{58}
\end{quote}

While the Court was correct to reject the Nalebuff proposal, it reaches the right conclusion for the wrong reasons. The Court incorrectly asserts that price discrimination, without more, implies at least “some” evidence of market power. As discussed, this view adopts the own-price elasticity definition of antitrust market power that does not stem from the ability to control market conditions and adopts the unrealistic scenario of perfect competition as a competitive benchmark.

Nalebuff’s assertions that metering arrangements imply antitrust market power and are likely to reduce consumer welfare are both incorrect, but not because price discrimination implies a degree of market power too small to warrant antitrust concern. Rather, the Nalebuff argument is incorrect because it conflates the ability to price discriminate with the ability to influence market conditions and asserts that the practice is likely to harm consumers.

Nalebuff’s assertion that metering implies market power is also incorrect. The reason that Nalebuff mistakenly concludes that metering is evidence of market power is because they expressly adopt the view that “the amount of price discrimination a firm can impose is related to its market power.”\textsuperscript{59} Following this logic, Nalebuff argues that the fact that Trident was able to charge customers 2.5 to 4 times the price offered by Independent Ink for ink indicates a “substantial degree of price discrimination and hence market power.”\textsuperscript{60} We have already seen the fallacy of assuming this sort of relationship between elasticity of demand and antitrust market power. The ability to price discriminate does not imply antitrust market power because the

\begin{flushleft}
58 Id. (citation omitted).
60 Id.
\end{flushleft}
latter requires the ability to control market conditions. The power to price discriminate is not equivalent to the ability to control market conditions, nor is it a related phenomenon to a lesser degree.

The welfare effects of aftermarket metering arrangements like the one involved in Independent Ink also do not support Nalebuff’s claims. Nalebuff argues that “[t]he act of price discrimination via tied sales creates a harm to consumers.”61 While the authors concede that price discrimination can expand output and improve efficiency in some cases, they argue that “there is no reason to believe that price discrimination is efficient” and emphasize that “there is no general result that suggests that imperfect price discrimination improves efficiency, even treating consumer surplus and producer profits equally.”62 The last statement is correct as a technical matter, but proves nothing. The possibility that price discrimination reduces consumer welfare is not very useful. The same literature generally recognizes that price discrimination does not always reduce efficiency or harm consumers and increasingly recognizes that price discrimination is a part of the competitive process. As discussed, this welfare analysis also ignores the consumer welfare-enhancing dynamic effects associated with price discrimination as producers earn additional profits and make significant additional investments and innovations that benefit consumers.

Perhaps most importantly, even if one were to accept the static welfare analysis, the analysis does not support Nalebuff’s position regarding the presumption of market power. The modern economics literature is full of results establishing that nearly all forms of conduct may or may not be efficient depending on the circumstances. The burden of proof on the issue of market power for every single one of these practices, however, is placed on the plaintiff. The possibility that some subset of discriminatory arrangements may reduce static consumer welfare does not imply that the burden of proof with respect to market power should be placed on the defendant in this case.

The fallacy of the relationship between price discrimination and antitrust market power is a significant problem for antitrust. It is crucial to keep distinct the concepts of economic market power and

61Id. at 17.
62Id. at 19–20.
antitrust market power, despite the temptation to reconcile and unify the two with appeals to “degrees” or entry conditions. Antitrust in a world where price discrimination does imply antitrust market power will find violations in the most mundane marketing arrangements, e.g., the use of supermarket grocery coupons, movie theater senior citizen discounts, or quantity discounts on Michael Jordan’s Cologne. Attempts to reconcile this tension with appeals to entry conditions, or dismissing these situations as involving some, but “not enough,” market power to warrant antitrust concern, are convenient but ultimately misguided answers to this problem. The more accurate, and appropriate, policy response is to adopt a definition of market power that takes seriously the notion that such power refers to the ability of the monopolist to change competitive conditions in the market.

As I argue in Part III, an integral part of such a policy response is for antitrust to ignore competitive price discrimination without separate evidence of the exercise of antitrust market power.

III. Competitive Price Discrimination Should Not Be an Antitrust Problem

Modern antitrust scholars have emphasized a desire to ground policy in the empirical realities of real world markets. The Supreme Court has expressed a similar preference for antitrust rules that reflect empirical reality.\textsuperscript{63} \textit{Independent Ink} represents an important step forward in this regard. However, the empirical reality—that the modern economy involves markets nearly universally characterized by product differentiation and competitive price discrimination—has yet to be fully recognized by antitrust doctrine. The link between these two is clear: patents confer a right to exclude which guarantees only the absence of perfect substitutes, which is all that is required to price discriminate. Rather, price discrimination is a normal part of the competitive process in the modern economy, and consumers would benefit from an antitrust regime that abandoned any inferences of anticompetitive effect associated with the practice.

\textsuperscript{63}See, e.g., Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 466–67 (1992) (“Legal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law . . . . In determining the existence of market power . . . this Court has examined closely the economic reality of the market at issue.”).
Justice Stevens’ opinion in *Independent Ink* explicitly recognizes that price discrimination occurs in competitive markets and that is not a sufficient condition for market power. The opinion also properly rejects the view, expressed by the Nalebuff brief, that price discrimination associated with metering arrangements is more likely than not to generate consumer welfare losses. These are excellent starting points for a more sensible antitrust policy. However, once it is recognized that price discrimination does not confer monopoly power, and does not generally produce anticompetitive effects, only one additional step is required to illustrate that competitive price discrimination should remain outside the domain of modern antitrust enforcement. *Independent Ink* thus represents an opportunity foregone for the Court to clarify the confused but critical antitrust jurisprudence governing practices that facilitate price discrimination by embracing the economic logic behind its rejection of the market power presumption.

A. Antitrust Law Should Not Prohibit the Potential Negative Welfare Effects Arising from Price Discrimination

Price discrimination does not generally reduce consumer welfare when one appropriately accounts for all static and dynamic welfare effects. While some discriminatory arrangements involve gains to all consumers, it is also certainly possible for a discriminatory arrangement to result in net losses for consumers. So why should antitrust ignore these arrangements altogether rather than identifying and prosecuting those cases involving negative net welfare effects?

There are two very good reasons to refrain from such detailed welfare analyses. One is conceptual and the other is pragmatic in nature. Conceptually, it is essential to understand that any net consumer welfare losses arising out of competitive price discrimination do not involve monopoly power and therefore do not arise out of an artificial restriction of output. The hallmark of modern antitrust enforcement is the prevention of the exercise of monopoly power to the detriment of consumers. Even in the case that net consumer welfare losses arise from competitive price discrimination, the antitrust laws should not prohibit them. The antitrust laws were designed to prevent anticompetitive conduct, and price discrimination is not such conduct.

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64126 S. Ct. at 1292.
65Id.
welfare decreases as a result of a discriminatory arrangement, the losses are simply not the sort of losses that the antitrust laws are designed to protect against. As Klein and Wiley argue:

> Antitrust law should not, however, involve a determination of which consumers gain and which lose when a firm enforces a discriminatory pricing arrangement with a refusal to deal. It is also not the role of antitrust to determine, for example, that there are too many restaurants in the economy or that restaurants are of too diverse a variety because of price discrimination. We look to the unsupervised competitive market process and not to antitrust law to settle such issues.\(^67\)

The pragmatic reason is that such a test would involve an unacceptable risk of false positives.\(^68\) Because arrangements facilitating price discrimination generally improve the welfare of some consumers while other consumers lose, such an analysis would require the calculation of net welfare effects. This is an extremely demanding task to require of courts and would require consumer specific data, which is difficult to obtain, as is the measurement of the dynamic welfare benefits already discussed.

\(\text{\textit{B. Conduct Involving the Exercise of Monopoly Power May Be Attacked Whether or Not it Involves a Discriminatory Arrangement}}\)

One might be skeptical that ignoring competitive price discrimination might result in unnecessary immunity from antitrust scrutiny for monopolists utilizing discriminatory arrangements to exclude rivals and injure competition. Such harm, which results from the exercise of monopoly power, is precisely what the antitrust laws are designed to prevent and should not be immunized. Of course, immunizing competitive price discrimination, and therefore removing from the domain of antitrust enforcement conduct that may harm welfare only because of its discriminatory effects, does not grant a free pass to monopolists exercising their power to the detriment of consumers.

To the contrary, conduct involving price discrimination, such as aftermarket tying arrangements, quantity discounts, refusals to deal,  

\(^{67}\text{Id. at 620.}\)  

\(^{68}\text{Id. at 620–21.}\)
or other arrangements may lead to anticompetitive effects by creating or maintaining antitrust market power, that is, the power to control market conditions. Under these limited circumstances, conduct facilitating price discrimination should be subject to the enforcement of the antitrust laws. The important analytical point is that any anticompetitive effects from the separate, monopolistic conduct should be analyzed separately from the welfare effects of price discrimination.

IV. Conclusion

It is well known and universally accepted that intellectual property rights rarely confer monopoly power in the antitrust sense. Just as plainly, the power to price discriminate does not necessitate a finding of monopoly power. Independent Ink should be applauded for incorporating the first proposition into antitrust doctrine by rejecting the patent presumption. This is no small event for antitrust doctrine. Consumers will benefit from this decision as intellectual property holders engage in the competitive process with less unwarranted fear of antitrust liability.

Perhaps just as importantly, Independent Ink also represents a missed opportunity to clarify the role of antitrust enforcement in policing competitive conduct which facilitates price discrimination without threatening welfare losses associated with the exercise of true monopoly power. While the Court embraced the notion that competitive price discrimination, such as the metering arrangement adopted by Illinois Tool Works, does not require market power, the Court did not embrace the economic logic supporting its holding rejecting the patent presumption. Because patent rights only grant the power to price discriminate, an ability shared by nearly every firm in our modern economy facing a downward sloping demand curve, the Court could have correctly rejected the view that price discrimination confers antitrust market power.

The failure to broadly and universally reject the claim that price discrimination confers antitrust market power is not without its costs. The misleading notion that competitive contracting processes facilitating price discrimination imply antitrust market power still exists in many arenas of antitrust jurisprudence. For example, the Court’s analysis in Kodak leaves open the possibility that firms like Illinois Tool Works will face similar claims easily reconstituted as
aftermarket tying cases involving “consumer lock-in,” rather than invoking the patent presumption. The substitution towards “consumer lock-in” cases from patent presumption-based claims demonstrates yet another reason why *Independent Ink* must be viewed as a missed opportunity.

The persistent conflation of the concepts of economic market power and antitrust market power creates an antitrust policy which finds some degree of antitrust market power in nearly every firm in the economy. Competitive price discrimination is not a problem deserving of antitrust scrutiny. Price discrimination is generally consumer welfare enhancing when one accounts for the dynamic effects associated with product differentiation investments designed to attract more consumers. Further, even when the net welfare effect of a discriminatory arrangement is negative, these welfare losses are not the result of an artificial reduction in output and are nearly impossible to measure. Any negative welfare effects associated with competitive price discrimination do not involve the exercise of monopoly power, and the antitrust laws are not designed to micro-manage the competitive process to find and prohibit those arrangements which help some consumers but hurt others. In the rare case where the discriminatory arrangement is adopted by a monopolist, rather than a competitive firm with the ability to price discriminate, and creates an anticompetitive effect, the antitrust laws should attack the conduct. The important point is that the competitive harm in these cases has nothing to do with price discrimination and everything to do with the exercise of monopoly power.

Product differentiation is the hallmark of firms in our modern economy. Intellectual property rights allow firms to exclude competitors from offering perfect substitutes, and therefore to price discriminate. While it is difficult to make any form of discrimination sound good, I have attempted to demonstrate here that it typically accrues to the benefit of consumers and, in any event, is part of the normal competitive process and not a function of monopolistic power. Rather, it is a power held by every restaurant, landlord, corner gas station, supermarket, and small firm in the economy. Because price discrimination is profitable, we can expect firms in our modern economy to invest substantial resources not only in product differentiation, but also in finding methods to price discriminate. This is no need for competitive concern, as these investments are motivated
by the competitive process, not monopoly power, and take the form of providing benefits to consumers. The pervasive nature of price discrimination underlines the importance of understanding its role in the normal competitive process. *Independent Ink* demonstrates that while antitrust law has come a long way in terms of economic sophistication, it has not yet fully incorporated lessons from the economic literature regarding competitive price discrimination, and this failure threatens consumer welfare by associating anticompetitive inferences with an inherently competitive practice.