Kodak and Aftermarket Tying Analysis: Some Comparative Thoughts

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Abstract: This article examines three recent cases — one from the U.S. Supreme Court, one from the European Court of Justice and one from the High Court of Osaka — dealing with the antitrust implications of aftermarket tying arrangements. Tying occurs when the manufacturer of a machine refuses to sell spare parts to independent repair and service companies. The antitrust implications of tying will be of growing importance in the future as manufactured equipment becomes ever more complex and dependent on specialized repair parts and service. After an introductory review of conventional tying doctrine, the paper compares the approaches of the three courts, finding them strikingly similar in analysis and outcome, suggesting the presence of some broadly applicable principles of free market conduct.

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I. INTRODUCTION

Kodak is an American manufacturer of copying machines. Hugin is a Swedish manufacturer of cash registers. Toshiba is a Japanese manufacturer of elevators. All three companies have been involved in recent litigation in which they were charged with refusing to sell repair parts to customers unless the customers also bought repair service from them.

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Aftermarket servicing of complex machinery is becoming a larger issue each year. More and more, machines require specialized repair and maintenance, often with parts unique to the manufacturer. Manufacturers may wish to capitalize on this dominance in parts to expand service opportunities — both as an aid to quality control and to increase revenue.

This paper examines the recent *Kodak*¹ case to illustrate how current U.S. tying law is being applied to the problem of aftermarket parts and service competition. The paper then will briefly compare the somewhat similar work of the European Court of Justice in the *Hugin* cash register case,² and the Osaka High Court in the *Toshiba* elevator case.³ While the outcomes of the three cases are quite similar, and while the issues addressed have much in common, the manner of approach is both different and instructive. The article ends with some recommendations about U.S. tying law which are suggested by the comparisons.

II. THE DOCTRINAL PUZZLES OF U.S. TYING LAW

Tying arrangements arise when the seller of one product imposes various sorts of pressure on a buyer to induce the buyer to buy additional products from the seller or the seller’s designee. The metaphor is that the buyer is “tied” to one product by his desire for the other (“tying”) product.

There are innumerable variations. The pressure imposed by the tie will vary as a function of buyer attitudes. When the buyer has adequate substitutes for the tying product, the tie may have no force — a meaningless gesture by the seller. On the other hand, the form of the condition may be more or less complete. A seller may refuse to sell the tying product at all unless the buyer also takes the tied product, or the seller may lower the price of the tying product for buyers who also buy the tied product.

The motives for tying are many and they have been debated at length.⁴ A firm with substantial power in a tying product may think it can employ that power to extend its sales of another product. Or, a firm may use the tie as a metering device to gauge the intensity of user preference for the tying product, as part of a scheme of differential pricing. The tie may be

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⁴ For a general discussion, see SHERER & ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 565-69 (3rd Ed. 1990).
in aid of quality control, as when a firm wishes to prevent damage to its salt machine (and its reputation) by use of inferior grades of salt. A tie may be a way of capturing production or distribution economies. Finally, a tie may make it possible to avoid some kinds of regulation, as where a regulated seller seeks additional profits by tying an unregulated product (which can be priced as the seller pleases) to a regulated product whose price is controlled.

Doctrine treating an arrangement with so many forms and purposes is not likely to be simple, and it is no surprise that the U.S. law of tying has never been wholly clear or certain. The antitrust concerns are usually stated to be two, though there are other shadings in the opinions. First, a tie is said to coerce the buyer in choosing products in the tied market. Second, the effective tie may foreclose sellers in the tied market, giving the tying defendant an advantage in the tied market on some basis other than the merits of his product.5

Tying has become very controversial in the U.S. The concerns with coercion and foreclosure make tying one of those antitrust offenses the strict Chicago-oriented theorist would have considerable doubts about. The concern with coercion might be phrased in terms of a populist sympathy for small buyers, and the concern for foreclosure may suggest a similar sympathy to the notion that producer (rather than consumer) welfare is a legitimate goal of antitrust. Neither concept requires the suggested sympathy, of course, and it is possible to see both concerns as merely the expression of the view that competition should so far as possible be based on the merits. Where buyers buy for reasons other than the merits of the goods, and where sellers cannot compete even though on their merits their products are equal or better, competition cannot do its job of promoting consumer welfare. Hence tying, often the whipping boy of the Chicago theorist — continues to be regarded as a serious offense by most judges. And as the sequel will show, the concern is not limited to the U.S.

In U.S. law, tying is principally governed by section 1 of the Sherman Act6 or section 3 of the Clayton Act7 though there are some other applicable statutes.8 While the Clayton Act was designed specifically to condemn ty-

8 Other statutes may have antitying provisions, and the standards of liability may differ sharply from Clayton and Sherman Act standards. For a very strict tying prohibition, see the antitying provisions of the Bank Holding Company Act, 12 U.S.C. §§ 1971-78 as interpreted in Dibidole v. Am. Bank, 916 F. 2d 300 (5th Cir. 1990).
ing, it applies only to sales of "commodities" — apparently excluding real estate and (of relevance in this discussion) services. In such cases, plaintiffs frame their complaints under section 1 of the Sherman Act.\(^9\)

As the courts have interpreted these general enactments, they have developed a standard list of doctrinal elements.

### A. Two Products

First, there must be two products, a requirement that has produced a surprising amount of litigation.\(^10\) The difficulty lies principally in distinguishing a forbidden tie of two products from a perfectly legitimate "package." When a car manufacturer refuses to sell a car without tires, we tend not to characterize the arrangement as a tie — we sense intuitively that we are dealing with one package, a car, inclusive of its tires. But when the manufacturer insists we take car radios or air conditioners, the package concept gets progressively less persuasive. In *Jefferson Parish*,\(^11\) Justice Stevens, writing for the Court, looked at the question from the perspective of the buyer (e.g., Do buyers perceive the two elements as separate products? Are the products usually available separately?). Justice O'Connor's concurring opinion seemed to focus more on the seller (e.g., Is it easier, or cheaper, or more efficient to market the products together?).\(^12\) The more well-reasoned judicial treatments seem to share two traits. First, they are practical, trying to keep both the buyer's and seller's perspectives in balance. Second, the courts consider customer perceptions and preferences, usage and traditions, cost savings and seller motive.\(^13\)

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\(^9\) Thus while tying is usually tried under section 3 of the Clayton Act or section 1 of the Sherman Act, there is an intricate relationship between tying and monopolization in U.S. antitrust law which usually results in a count under section 2 Sherman Act being added to most tying complaints. The matter will be touched on briefly below.

\(^10\) As will be seen below, while the Kodak litigation involved easily separable products (machines, service, spare parts), it is possible to argue (and Justice Scalia comes close to doing so) that where the separate components are so interrelated by market forces, they are best treated as a single package. See also Justice Stevens' opinion in *Jefferson Parish Hospital Dist. v. Hyde*, 466 U.S. 2, 9-18 (1984) (discussing how economic relationships can affect the one product/two product question).


\(^12\) The policies behind the approaches may differ substantially. The Stevens (demand) approach tends to protect consumers from packaging which — despite possible production efficiencies — forces them to take products they do not want. The O'Connor (supply) approach insures that whatever the perceptions of consumers, antitrust should not require a supplier to disaggregate products when doing so substantially increases production or distribution costs.

B. Power in the Tying Market

Second, if a tie is to have competitive significance in the tied market, the tying product must be desired by customers. That requirement is usually summed up in the proposition that a tie is not subject to condemnation unless the defendant has power in the tying market. This doctrinal step has also generated substantial confusion and disagreement in the opinions.

There are a few presumptions that sometimes ease the task of decision, as where a court presumes the existence of power because the tying product is patented or copyrighted, or where the product is in some relevant sense “unique.” But usually, the question is converted into the familiar search for a “relevant market” and an inquiry into what share of the tying market represents enough power to affect buyer choice in the tied market.

A special part of this problem is the relationship of buyer ignorance and tying power. In Jefferson Parish the court of appeals had held that third party payers made hospital customers indifferent as to price, and this indifference created a kind of de facto market power in defendant, who could raise price with little penalty in lost revenues. In reversing, the Supreme Court said consumer indifference to price does not generate the kind of market power that justifies condemnation of tying. As will appear below, a similar question is revisited — with somewhat different results — in Kodak.

C. Degree of Effect

Third, if there are two products and if the seller has sufficient power in the tying market, there remains a question about the required degree of

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14 Jefferson Parish v. Hyde, 466 U.S. 2 (1984). The presumption has been criticized since the existence of a patent may give the seller no economic power in the market. For example, in Int'l Salt v. United States, 332 U.S. 392 (1947), the seller of a patented machine was held to have sufficient power in the tying market with no inquiry about whether there might have been hundreds of other similar machines available to buyers. See J. Diane Brinson, Proof of Economic Power in a Sherman Act Tying Case: Should Economic Power be Presumed When the Tying Product is Patented or Copyrighted?, 48 LA. L. REV. 29 (1987).


effect in the tied market. The Court continues to state this as a separate re-
requirement but the requirement is not onerous. The “not insubstantial”
formula of International Salt\(^\text{18}\) seems to capture the essence of the holdings,
though sometimes the Court states the standard positively,\(^\text{19}\) implying an
arguably higher standard.

\section*{D. Demonstrated Benefits from the Tie}

Finally, as all the elements of the tying offense are made out, there
has always been a narrow ground of escape for the seller who can prove
significant benefits from the tie. Chief among these has been the seller’s
need for quality control. Sometimes the justification can be established\(^\text{20}\)
and sometimes it cannot\(^\text{21}\) but the possibility has always been preserved.
The courts have not been generous to defendants.\(^\text{22}\)

Is tying a per se offense in U.S. antitrust law? There has been a
studied reluctance on the Court’s part to clarify this question. Technically,
this should be a critical matter, because according to the orthodox learning,
the classification determines what has to be proved, and by whom, as well
as which defenses or justifications are available.\(^\text{23}\) But while many courts
continue to call tying one of the per se offenses,\(^\text{24}\) it is seldom treated as
other classic per se offenses. As the above discussion indicates, a plaintiff
must show significant power, and the defendant may now and then justify a
tie — two showings that are not permitted in strict per se analysis.\(^\text{25}\) The
doctrine is obviously in flux; until it stabilizes, we can expect opinions like
\textit{Jefferson Parish} in which five members of the Court were clear that “it is

\begin{itemize}
  \item \textsuperscript{18} Int'l Salt v. United States, 332 U.S. 392 (1947).
  \item \textsuperscript{19} “We have refused to condemn tying arrangements unless a substantial volume of commerce is
  \item \textsuperscript{21} United States v. Int'l Salt, 332 U.S. 392 (1947).
  \item \textsuperscript{22} In \textit{Jerrold}, the court sharply limited the defense in time and limited its application to fledgling
companies whose reputation for quality was critical. United States v. Jerrold Electrons. Corp., 187 F. Supp
very restrictive view of this defense (“To prevail on [this] basis, Kodak would have to prove that its tying
arrangement is the only way that highest quality service can be assured.”). Image Tech. Serv. v. Eastman
Kodak Co., 903 F. 2d 612, 618 (9th Cir. 1990).
  \item \textsuperscript{23} AREEDA & TURNER, supra note 5, at 257-68.
  \item \textsuperscript{24} See Jefferson Parish v. Hyde, 466 U.S. 2 (1984).
  \item \textsuperscript{25} The classic attitude is expressed in the Court’s opinion in United States v. Soconoy-Vacuum, 310
U.S. 150 (1940).
\end{itemize}
far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements . . . are unreasonable per se" and four members of the Court were equally clear that "the time has come to abandon the per se label and refocus the inquiry on the adverse economic effects and the potential economic benefits that the tie may have." In Kodak, the majority opinion simply does not mention the question at all.

III. The Kodak Litigation

Kodak is set against a backdrop of many years of open warfare between original equipment manufacturers ("OEMs") and independent service organizations ("ISOs") in the repair and maintenance of complex machinery. Historically, the OEMs controlled the aftermarket service business because of their size and position. With the increase in complex electronic equipment — where aftermarket service can be very profitable — the ISOs began to grow in size and aggressiveness. OEMs responded with various efforts to protect their share of the aftermarket service business. In the American culture, litigation plays a role in resolving such conflicts. Indeed, some 20 cases were working their way through the courts when the Kodak litigation reached the high court.

While Justice Blackmun's opinion for the six person majority opens by saying, "This is yet another case that concerns the standard for summary judgment in an antitrust controversy," the case should not be regarded as merely a narrow, technical ruling on a procedural question. The criticism by Chicago school enthusiasts and the applause from others suggests that the case may have considerably broader meaning.

The facts in relevant outline are not complex. Kodak manufactures and sells complex business machines — copiers, scanners, computer storage and retrieval devices. Kodak also makes the unique parts for repair of its

27 466 U.S. at 2.
32 Interviews of several past assistant Attorneys General for Antitrust are summarized in Ronald S. Katz & Janet S. Arnold, Differing Perspectives on Kodak, COMPUTER L., July 1993, at 9.
equipment, or contracts with other manufacturers to make the parts. After a sale of its equipment, Kodak provides an initial warranty period, at the end of which period customers are free to buy parts and service from Kodak or to use the services of independent service organizations. ISOs got Kodak parts wherever they could: from Kodak when possible; from manufacturers who made parts for Kodak; from brokers who stripped used Kodak equipment for parts; and from Kodak's customers who could buy parts from Kodak. There was evidence in the case suggesting that ISOs provided service at a price "substantially lower" than Kodak did and that "some customers found that ISO service was of higher quality" than Kodak's.

Beginning in 1985 and 1986, Kodak began a policy of restricting access to its parts to those who also bought service from Kodak. The company refused to sell parts to ISOs, got an agreement from those who manufactured its parts not to sell to ISOs, pressured customers not to resell parts to ISOs, and took steps to reduce the availability of used machines whose parts could be resold. The purpose of this new Kodak policy was to prevent the success of the ISOs and, said the Court, "it succeeded. ISOs were unable to obtain parts... and many were forced out of business, while others lost substantial revenue. ... Customers were forced to switch to Kodak service even though they preferred ISO service."

The ISOs responded with this suit, alleging an unlawful tie in violation of section 1 of the Sherman Act and monopolization or attempted monopolization in violation of section 2. The district court — after very

34 Id.
35 In tying analysis, it is not usually important that defendant changed its procedures to improve its competitive position with respect to a rival. If the case is viewed as a unilateral refusal to deal, however, section 2 has been interpreted to suggest the possible relevance of a change in practice. See Aspen v. Aspen Highlands, 472 U.S. 585 (1985).
37 This discussion will focus only on the Court's tying holding. But as with an optical illusion, the offense one sees in this arrangement depends on one's perspective. From the viewpoint of a plaintiff who is a buyer of copiers, the Kodak restrictions look like a conventional tying arrangement — the plaintiff cannot get Kodak parts without also buying Kodak service. This means the relevant laws are section 1 of the Sherman Act or section 3 of Clayton Act and these in turn invite inquiries into the considerations reviewed earlier.

But if the plaintiff is a foreclosed seller in the tied (service) market, as was true in Kodak, another possible characterization emerges. While the seller could still raise a tying claim, the case could alternatively be regarded as a unilateral refusal to deal. After all, the plaintiff now is not complaining of any tie in a sale to it. It does not have any need for the service, it just wants the parts, and its principal concern is that the defendant refuses to sell them. The refusal to deal claim fits better.

Unilateral refusals to deal are not generally actionable except in aid of monopoly; hence, the relevant law is now found in the monopolization prohibition of section 2 of the Sherman Act — a sharply different
limited discovery and without a hearing — granted summary judgment in favor of Kodak. The 9th Circuit Court of Appeals reversed. On the tying claim, the court held that summary judgment should not have been granted because the following material facts were in dispute:

1. whether Kodak had sufficient power in the tying market (parts) to affect competition in the tied market (service);
2. whether competition in the copier market effectively curbed Kodak's power in the parts market;
3. whether Kodak needed this restrictive policy for quality control; and
4. whether Kodak needed the policy to control inventory costs.

The court also held Kodak's third justification (that the policy was necessary to prevent ISO "free riding" on Kodak's investment) legally insufficient.

The Supreme Court affirmed, remanding the case for trial. The Court began its consideration with the two-product issue. Kodak urged that since parts are never needed except with service, the two in effect constituted a single product. Justice Scalia in dissent found this argument persuasive, but

set of doctrines. Section 2 analysis proceeds along two broad lines. First, present or likely monopoly power must be shown. In this inquiry, while the one product/two product question is not of independent importance, some relevant market must be defined. Note that one measures power in a section 2 case not by looking for evidence of buyer coercion in another market but by directly considering whether the power in the market one is examining is of monopoly levels or is dangerously likely to become so.

Second, section 2 has a conduct component which again presents quiet different questions from those considered in a section 1 tying case. Under section 2, plaintiff must show that defendant's conduct is in some sense exclusionary or predatory. Tying's requirement of some effect in the tied market is not an independent element of the monopolization claim, but an increase in prices in the relevant market could be the basis for an inference that defendant was engaged in exclusionary conduct.

The Court in Kodak ruled without elaborate discussion that summary judgment was improper on plaintiff's section 2 claim as (1) triable issues of Kodak's monopoly power were raised (the company had 100% of the Kodak parts market and 80% of the Kodak service market) and (2) triable issues of conduct were raised by proof that Kodak "took exclusionary action to maintain its parts monopoly and used its control over parts to strengthen its monopoly share of the Kodak service market." Eastman Kodak v. Image Tech. Serv., 112 S. Ct. 2072, 2091 (1992).


38 Image Tech. Serv. v. Eastman Kodak Co., 903 F. 2d 612 (9th Cir. 1990).
the majority found it untrue in fact (service and parts are sold separately) and unacceptable in principle (many occasions for prohibited tying arise from functionally related or complementary products).

The more complex issue was how to measure Kodak’s power in the relevant market. Kodak did not have significant power in the copier market itself. On the other hand, it had very nearly monopoly power in the market for Kodak parts. While it is seldom talked about explicitly, most recognize one of the most troublesome features of market definition issues: seldom will any one of the contending market definitions by itself provide an accurate measure of the defendant’s power. In this case, the copier market percentages alone would significantly understate Kodak’s power, and the parts market percentages would significantly overstate it.

Kodak’s response to this dilemma was to suggest that an accurate power measure would have to account for the relationship between these markets. Kodak argued that without power in the copier market, it couldn’t exercise any power it might otherwise have in the parts market. Thus, if Kodak employed a parts tie in an attempt to force customers to pay supra-competitive prices for parts or service, customers could easily defeat the plan by buying copiers from other manufacturers. Hence, Kodak’s apparent monopoly on parts could not be exercised to the consumer’s detriment. The attempted exercise would simply cost Kodak lost copier sales.

The Court correctly concluded that an inability to raise price without losing sales was not the equivalent of no market power. The Court understood the textbook principle that an increase in price will almost always mean a loss of sales. A seller with power would nevertheless raise price so long as marginal revenue from the last sale was greater than marginal cost of producing the material sold. At that point — where price increases cost the monopolist more in revenues than they returned — the rational monopolist will stop increasing price.

Even conceding that, Kodak urged that it could not raise parts and service prices beyond the point where the equipment/parts/service package cost more than what was charged by its rivals in the copier market. When

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39 Kodak competed in the copier market with Xerox, IBM, Bell and Howell, 3M and various Japanese companies. Plaintiff did not contest Kodak’s assertion that defendant had no market power in the machine market and was not permitted to raise the issue again on appeal. Kodak v. Image Tech. Serv., 112 S. Ct. 2072, 2081 n.10 (1992). Kodak’s share of the market—depending on market definition—was said to be between 2% and 23%. See Lopatka, The American Lawyer, THE RECORDER, Aug. 17, 1992, at 8.

40 “Even if Kodak could not raise the price of service and parts one cent without losing equipment sales, that fact would not disprove market power in the aftermarkets.” Eastman Kodak v. Image Tech. Serv., 112 S. Ct. 2072, 2084 (1992).
Kodak prices went above that level, its customers would simply shift to a rival supplier of copiers. Hence, Kodak’s share in the copier market was the better measure of its real power.

The Court again countered Kodak’s economic analysis with an economic argument of its own, delving into the literature on information asymmetries, life cycle costing, and oligopoly theory. Kodak’s scenario, said the Court, assumed all customers would have good information about the life cycle cost of this equipment, that in making purchases, buyers would know which brands would have the lowest equipment/parts/service package price over the useful life of the product. In fact, noted the Court, such information is costly to acquire at the time of purchase, requiring sophisticated analyses of a substantial amount of raw data.\footnote{The Court mentions data on price, quality, availability of products needed to operate, upgrade, or enhance the initial equipment, as well as service and repair costs, including estimates of breakdown frequency, nature of repairs, price of service and parts, length of ‘down time’ and losses incurred from ‘down time’ and ‘initial purchase information such as prices, features, quality, and available warranties, for different machine with different capabilities, and residual value information such as the longevity of product use and its potential resale or trade-in value.’ Eastman Kodak v. Image Tech. Serv., 112 S. Ct. 2072, 2086-87 (1992). The Court added that information may be buyer specific so that experience of other buyers might not be helpful in estimating costs. The Court also noted that any estimates might change over the course of a buyer’s use of the equipment, as sellers changed and adjusted their service and parts prices.} Given those costs, whether buyers in the copier market typically had that kind of information could not be assumed. Indeed, from presentations made by several amici, one might rather assume that good information was not typically available to many buyers of this equipment. Amicus briefs filed by a number of state and local governments noted that for many large government purchasers life cycle costing was not only difficult and expensive: it was sometimes illegal (under competitive bidding laws), infeasible (different agencies did purchasing from those that budgeted for repair and maintenance) or politically unlikely (given the uncertainties, few government buyers would prefer future savings to low cost today).\footnote{Stephen Caulkins, \textit{Supreme Court Antitrust 1991-92: the Revenge of the Amici}, 61 \textit{Antitrust L.J.} 269 (1993).} In any event, the presence, or absence, of information must be the subject of proof, not assumption; hence summary judgment was improperly granted by the District Court.

Nor could Kodak’s rivals in the copier market be relied on to make this information available to Kodak’s customers. The Court was not satis-
fied that those oligopolist rivals would have reliable information themselves or, if they did, they would have inducements to disclose it.\textsuperscript{43}

The Court also rejected Kodak’s assertion that there would be \textit{sophisticated} buyers who \textit{would} have good information about Kodak’s copier/service prices and that the fear of losing those buyers would require Kodak to keep its prices down for \textit{all} buyers. The Court seemed to think some form of price discrimination was possible through which Kodak might lower prices for sophisticated buyers and still exploit its power over unsophisticated buyers. Even if price discrimination was not possible, the Court seems to have felt that the number of sophisticated buyers could be small. Kodak might be able to more than recoup through higher prices to others the loss it incurred in losing the sophisticated buyers.\textsuperscript{44}

The Court noted that even if \textit{future} buyers could be protected by available information on the life cycle costs of Kodak products, \textit{present} owners of Kodak equipment were at the mercy of the company. Where the short run costs of switching to another supplier are substantial, a buyer is “locked in” to the Kodak brand, giving Kodak a type of market power that could be exploited at the buyer’s expense. Assessing so-called “switching costs” is not easier than calculating information costs. The cost incurred by any particular buyer in switching to another brand of equipment will vary as a function of such things as the length of time the present equipment has been in service, the degree to which the buyer’s situation is brand-specific (including its training, computer programming, etc.), how rapidly technology is changing (there is a “switching benefit” if the brand to which the buyer switches is a significant upgrade), how old the buyer’s equipment is (near the end of its life cycle, switching costs will be lower), how many other buyers have low (or high) switching costs, and the degree to which the

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\item Competitive moves and countermoves of oligopolists have been studied in considerable detail. If a rival notified customers of Kodak’s high service and parts prices, it could expect retaliation from Kodak when it sought increases of its own. The optimum strategy for an oligopolist in this variation of the “prisoner’s dilemma” game might well be to allow Kodak’s prices to increase quietly so that one’s own prices could do the same. \textit{See} S\textsc{cherer} \& R\textsc{oss}, \textsc{Industrial} \textsc{Market} \textsc{Structure} \& \textsc{Economic} \textsc{Performance} ch.6 (3d Ed. 1990).
\item Kodak’s difficulty in responding to arguments such as these is in part the consequence of the thin record. Presumably, with more discovery, or with the results of a trial below, questions of this sort might have been easier to address in a less speculative way. Summary judgment on partial discovery is an inexpensive way for a defendant to win an antitrust case, but if appellate proceedings ensue, the lack of an adequate factual record may come back to haunt.
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buyer has protected itself from aftermarket exploitation by contractual provisions (service contracts, guaranteed multiple-sourcing, etc.).

In *Kodak*, because of the limited proceedings below, the presence and magnitude of any switching costs was unknown. But the claim that there were significant costs was plausible enough to the Court to make summary judgment improper. The Court concluded that at least there was: "a question of fact whether information costs and switching costs foil the simple assumption that the equipment and service markets act as pure complements to one another."

Finally, what does the *Kodak* majority tell us about the use of the per se rule of reason dichotomy in tying? Unfortunately, very little is said specifically about the question. There is some language opening the opinion that sounds per se in tone, but as the opinion develops, that seems a false signal. From the whole majority opinion, one can infer two things about the question. First, rule of reason considerations are relevant in tying analysis — benefits of and justifications for the arrangements will be showable at trial, and a showing of defendant's market power will be an essential part of plaintiff's case. Second, the Court is not yet ready explicitly to abandon the historical per se formula for tying. So the doctrinal uncertainty of *Jefferson Parish* remains.

In a sharp dissent, Justice Scalia conceded that the seller of durable equipment has leverage over "locked in" buyers in the sale of parts. But in Scalia's view, this kind of merely "circumstantial" power is not of concern to antitrust. It is inevitable in many commercial relationships — a "brief perturbation" whose correction should be left to tort and contract law. In Justice Scalia's view, the kind of power that is relevant to antitrust is power to exact monopoly rents from others over a more sustained time period. Such power is not shown here because of the vigorous competition in the copier market. Today's effort by Kodak to exploit its buyers will soon drive those buyers into the arms of waiting rivals and the time interval between "today" and "soon" is too small to be of antitrust significance.

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45 A good review of these issues is contained in Shapiro & Teece, *Systems Competition and Aftermarkets: An Economic Analysis of Kodak*, 34 ANTITRUST BULL. 135 (1994).
47 112 S. Ct. at 2079.
49 Joined by Justices O'Connor and Thomas.
Nor were concerns about information failures persuasive to Justice Scalia. In his view, all but "irrational consumers" — the "lowest common denominator" — would have access to information sufficient to keep Kodak prices line with its rivals.51

Justice Scalia also emphasized the benefits in parts/service ties: they may help protect a product's reputation for quality, they may lower initial purchase cost, and the close manufacturer/buyer relationship they produce may yield information to the manufacturer about needed design improvements. With this emphasis, it is possible to argue that Kodak's tie was merely a low cost method for assuring quality of service: much cheaper than trying to evaluate the quality of hundreds of independent suppliers of repair service.52

IV. CONCLUSION ON KODAK

Three points can be noted. First, many have found in the Kodak opinion a somewhat different tack than might have been expected, given the Court's romance with Chicago-style economic theories during the 80s. While it will take more points on the graph to plot a clear trajectory, the opinion does seem to suggest less enthusiasm for making fact determinations flow unarguably from theories and more concern that the theories adopted fit the facts we have. While the defendant raised serious theoretical doubts about the existence of tying power, the facts in the record showed that buyers seemed to be paying higher prices and getting lower quality service in the tied (service) market. The case does not represent a shift from abstract theory to real world facts as some have suggested. But it does represent an insistence that the theories we use be consistent with the facts we know.

Second, the opinion clarifies Matsushita's53 teaching on the appropriate use of summary judgment in antitrust litigation. Summary judgment analysis is a complex blend of factual and legal questions. Adjustments in the difficulty or ease of getting summary judgment can have massive impacts on substantive antitrust laws, with no change in the statute or the apparent meaning of the leading cases. Kodak relied on a reading of

51 112 S. Ct. at 2097.
52 See the discussion of Professor Lopatka in Commentary — Antitrust, THE RECORDER, Aug. 17, 1992, at 8.
Matsushita that would have entitled a defendant to summary judgment whenever it showed plaintiff's factual case improbable from the standpoint of economic theory. The Court said that Matsushita did not announce a new summary judgment rule enshrining economic theory as the arbiter of factual disputes. It held only that the parties' claims must be capable of belief by a reasonable jury. In that light, defendant's theoretical case in Kodak did not entitle it to summary judgment in the face of proof that Kodak's conduct in fact "increased prices and excluded competition." Indeed, the Court suggested that defendant's task in overcoming the force of plaintiff's proof was going to be "substantial."

The Court's obvious reluctance to decide the case with only skeletal proceedings below, and its willingness to give weight to evidence at variance with inferences drawn from economic theory are two factors which, in combination, could have significant impact on discovery tactics and settlement strategies.

Finally, on the underlying OEM/ISO battle, the slope of the playing field has altered a little. If service is not a subset of product but is itself a separate market, and if aftermarkets are not automatically assumed to be only as competitive as foremarkets, ISO plaintiffs may have a stronger hand in U.S. antitrust litigation than they did formerly. On the other hand, the response of the OEMs has yet to be heard. If OEMs alter warranty policies to void warranties where OEM parts are not used, or if they bundle lifetime service and parts into the original purchase price, the ISOs could be effectively destroyed. The likelihood of such measures depends on many factors, including the state of competition in the copier market.

V. SOME CONTRASTING APPROACHES TO TYING

A. A View from the EC: Hugin Cash Registers

Fifteen years ago, a case very like Kodak was presented to the European Court of Justice. In Hugin v. Commission, a Swedish manufacturer of cash registers refused to supply spare parts to Lipton, an independent repair and maintenance company — what in Kodak we called an ISO. The practice was challenged under article 86 of the Treaty of Rome

55 Id.
which prohibits "abuse" of a "dominant position" where the abuse "may affect trade among the member states."57

Because of the phrasing of article 86, the analysis is different from U.S. tying analysis. An article 86 case begins with a market definition, proceeds to a determination of whether the defendant is dominant in that market, and, if so, to a judgment about whether the defendant's conduct may affect trade among members of the community.

In defining the relevant market, the Commission and the Court conceded that Hugin did not have a dominant position in the cash register market itself. It had a small percentage of that market and that market was very competitive.58 The Commission and the Court instead held that for purposes of article 86, the relevant market was the market in Hugin machine parts. Hugin had argued, as did Kodak, that power over the parts market gave it no leverage in the service market so long as the underlying cash register market was competitive. Anticipating Kodak's argument exactly, Hugin urged that the two markets were necessarily interrelated, that "if they fix excessive prices [in parts or service] they run the risk of immediately losing customers who would . . . replace [the] cash registers [with competing brands]."59 Indeed, Hugin made a much stronger case for interrelated markets than Kodak did, since cash register users could quickly and cheaply switch to other brands if they were dissatisfied with Hugin's parts and service prices. They simply had to order a machine from another manufacturer, who would take their Hugin machine in trade.60

The Court did not address this claim directly. It concluded that there was a separate relevant market for parts because there were parts buyers other than cash register owners (namely, the ISOs). "Consequently, the market thus constituted by Hugin spare parts required by [ISOs] must be regarded as the relevant market for the purposes of the application of article 86. . . . It is in fact the market on which the alleged abuse was committed."61

Having defined the relevant market to be Hugin parts, it was not difficult to find Hugin's position dominant. The Court used the standard test — whether the firm's position was such that it could "determine its conduct

57 Treaty Establishing the European Economic Community Treaty, Mar. 25, 1957, arts. 86; 289 U.N.T.S. II.
59 Id. at 354.
60 Id.
61 Id. at 371.
without taking into account of competing sources of supply" — and found it clearly met here. There were no other manufacturers of Hugin parts, and the secondary market (parts salvaged from used machines) was not significant.

Having a dominant position does not violate article 86. Abuse is the gravamen of the offense, and the Court thus needed to decide whether refusal to supply spare parts to ISOs was an abuse of Hugin's dominant position. Unfortunately, for our comparative purposes, the Court managed to avoid deciding this issue. Because abuse does not offend article 86 unless it affects trade between member states, the Court turned first to the question of the effect of Hugin's restrictive practice on trade between member states. The Court rejected the Commission's position and concluded that Hugin's practices did not affect trade between member states: Lipton's activities were purely local, centered largely around London. If the restrictive practice had been abandoned, Lipton would have bought spare parts from a Hugin subsidiary in England, not from subsidiaries in other member states. Hence, abolition of the restrictive practice would not affect any trade between member states. It was true, the Court conceded, that with the restrictive practice in place, Lipton had attempted to buy parts from Hugin subsidiaries in other member states. But this was not, in the view of the Court, "an indication of the existence . . . of a normal pattern of trade between the Member States in spare parts."

Because Hugin was dismissed for want of an effect on trade between member states, the opinion is not dispositive on the article 86 legality of conduct of the kind of issue involved in Kodak — refusal of a dominant manufacturer to sell parts to independent service firms. Several later opinions, however, have suggested the possibility of a finding of abuse in such situations. In Maxicar v. Renault an Italian manufacturer of body parts for Renault automobiles sought a legal declaration that it could do so without violating Renault's intellectual property rights in the design of the parts. Maxicar made the usual showing in such cases that the cost of parts would drop dramatically if independent manufacture was permitted. The case turned on whether Renault's refusal to license others to manufacture the

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62 Id.
65 As one example, Maxicar noted that the price rear sills for one model of Renault dropped by 2/3 when manufacture was possible by independent companies. Case 53/87, Maxicar v. Renault, 1988 E.C.R. 6039, 6045 (1988).
parts was an abuse under article 86. The Court concluded that intellectual property rights created by national legislation could be given effect despite article 86, and that Renault's refusal to license other manufacturers was not an abuse under the article. Having granted Renault the right to prevent third parties from making the goods, the court then added a qualification that has been described as "so substantial as to render the right itself of limited value." The Court concluded that Renault could nevertheless be in violation of article 86 if it engaged in "certain abusive conduct, such as the arbitrary refusal to supply spare parts to independent repairers [or] the fixing of prices for spare parts at an unfair level . . . ." On the same day, and in the same language, the Court held that while the Swedish auto manufacturer Volvo could refuse to license others to manufacture parts in which it had design rights, it could be in violation of article 86 if it arbitrarily refused to supply spare parts to independent repairers or if it fixed unfair prices for the parts. It is not clear from the quoted language whether the Court intended to say that any refusal to supply spare parts to independent repairers would be arbitrary, or whether a refusal must be weighed in the circumstances for arbitrariness. One leading student finds support for the former reading in the special relationship the Court found between the manufacturer and the consumer. Because all understand that autos will need to be maintained and serviced, manufacturers' actions which deprive customers of those services would be an abuse under article 86.

The Court seems to be saying that there are situations where the relationship between the manufacturer . . . and the [buyer] of the product which it has manufactured is such that the rights themselves cannot be used in such a way as effectively to reduce the value of the product supplied.

The matter is clearly not settled as a matter of Community law, and clarification must await further developments. But we can tell from what has been decided so far that even in the case of manufacturers with important intellectual property rights to protect, the consumer's interest in fairly

69 Goyder, supra note 66, at 365-66.
priced, and widely available, repair and maintenance service will have significant weight in article 86 calculations. We know also, that the Court is not shy about handing down doctrine that is fact-specific and which will require the courts to make judgments about arbitrariness and unfairness.

B. A View from Japan: Toshiba Elevators

A recent case from the Osaka High Court has dealt with aftermarket tying. The court's treatment of the issues, though relatively brief, touches virtually all the tying issues that have troubled the U.S. and the European courts.

While American tying law has been developed over a greater period of time, and to a greater depth, than the tying law of Japan, Japan is virtually alone in having within its antitrust laws one of the few explicit prohibitions of tying. Even in the U.S. statute said to have been enacted with tying in mind — Clayton section 370 — the language of tying is not used, and one is left to puzzle out the meaning of a circumlocution prohibiting selling goods on the condition that the buyer does not deal with the seller's competitor.

By contrast, Japan's item No. 10 of the so-called "general designation" explicitly makes it an offense to:

Unjustly caus[e] the other party to purchase a commodity or service from oneself or from an entrepreneur designated by oneself by tying it to the supply of another commodity or service, or otherwise coercing the said party to deal with oneself or with an entrepreneur designated by oneself.

In Toshiba Elevator appellant Toshiba was one of six manufacturers of elevators in Japan. The six controlled all the repair and replacement parts and 90% of elevator maintenance service. The remaining 10% of the service was performed by independent service organizations. While some manufacturers sold parts freely, it was Toshiba's policy not to sell parts for

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71 FTC Notification No. 15, Item No. 10 (1982).
72 Id.
its elevators unless the buyer also bought repair and maintenance service. As in *Kodak* and *Hugin*, the manufacturer tied service to parts.

In 1984, Japan’s Fair Trade Commission issued a warning to Toshiba regarding its policies concerning the supply of parts. Presumably no change was made in that policy. On May 17, 1984, repair parts were ordered by a building owner (Tsuzuki) whose Toshiba elevator urgently needed repair. Installation and service were to be performed by an ISO under contract to maintain Tsuzuki’s elevators. Toshiba did not respond to the order and, after a second inquiry by Tsuzuki, replied that it would not ship the parts unless Tsuzuki agreed to have the service performed by Toshiba. Even with that agreement, Toshiba would not ship the parts for three months. Tsuzuki instead managed to effect the repair without new parts.

Tsuzuki filed a private action against Toshiba alleging several violations, including a tying violation under Item 10 of the General Designation. The Osaka District Court found an unlawful tie and Toshiba appealed. Before the High Court, Toshiba’s principal argument was that the tie was justified by the need for quality control. Only Toshiba had the detailed knowledge, the technology and the know-how to provide safe maintenance and repair of its elevators.

The High Court affirmed the District Court. There are several instructive points of comparison. First, it should be noted that there is no discussion of anything like a per se standard of legality in this case. From the beginning, the courts make it clear that only unreasonable conduct can violate Item 10. All of the discussion is aimed at interpreting and applying that standard to the facts of the case. The Court does not engage in any one product/two product analysis, except to say that parts and service — which can be supplied by different companies — could be considered separately in applying the tying law.

As to the degree of power in the tying (parts) market, the Court held only that there was coercion in the tied (service) market because of the tie. The argument of the dissent in *Kodak* — that aftermarket power should be judged by the degree of power the seller has in the foremarket — was not discussed in the opinion. That theory could be applied on the facts of this case only with great difficulty. First, from the market figures given above, one might assume significant power in the elevator market. Second, even if one assumed as did the *Kodak* dissent that many buyers carefully investigate life-cycle repair costs before buying, there is something compelling

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74 FTC Notification No. 15, Item No. 10, (1982).
about Tsuzuki's predicament. Having an elevator installed in your building is surely as dramatic a case of a long-term lock-in as one is likely to find. No matter what the state of competition in the elevator market, Tsuzuki was in a very difficult position. Justice Scalia would perhaps say it was a predicament caused by Tsuzuki's own neglect, but the Osaka Court seemed considerably more sympathetic.

Can a parts/service tie be justified under Japanese tying law? As indicated, Toshiba's principal defense was that the tie was required in aid of elevator safety. It is noteworthy that there is no argument here that quality control is necessary to protect the product's reputation — a claim often made in U.S. antitrust litigation. In Toshiba, quality control is spoken of exclusively in terms of public safety in the use of elevators.

The Japanese courts do not seem enthusiastic about this defense. The District Court in Toshiba refused to consider it as part of its evaluation of the reasonableness of Toshiba's practices because it did not bear a direct relation to the degree of competition in the market. The High Court found that quality control was relevant in the antitrust setting. Although it was not directly related to competition, it did bear on the broader questions of the consumer interest and, as such, could be used in the Court's calculation of reasonableness.

Having said that, the Court was not particularly generous to Toshiba. It seemed to suggest that risk of public harm in a poorly maintained elevator was not particularly great, and that most elevator accidents due to faulty maintenance involved only getting the device stuck between floors. In any event, the Court found the ISOs in this case to be fully qualified. The Court found corroboration of ISO quality in the facts that other manufacturers permitted ISOs to maintain their elevators with no ill effects and that Toshiba itself used local ISOs to maintain its elevators in Korea.

Interestingly, there must have been evidence that some ISOs were not fully qualified, as the Court addressed the issue. The possibility of some incompetent repair organizations did not justify Toshiba's policy, said the Court. The Court seemed to suggest that Toshiba could refuse sales of parts to service organizations only on some showing that those particular ISOs were unqualified. This is a very tough standard for defendants. Barring a serious accident, it might be difficult (and expensive) to show that a particular ISO is unqualified. Indeed, the part/service tie may in some cases be a low-cost method for policing the quality of service. Where such policing costs are high, (many, small ISOs, differently organized, trained, equipped
and financed) a tie may be the only sensible way to achieving quality con-
trol at reasonable cost. This does not mean that plainly anticompetitive
conduct should be permitted, only that an adequate sensitivity to the defend-
ant's plight seems warranted.

VI. Conclusion

Comparing the approach of other legal systems to U.S. aftermarket
tyling analysis, one senses that U.S. law is much more analytically elaborate.
When other systems arrive at plausibly correct answers with far less doct-
trinal apparatus, it is a fair question whether U.S. tying law has pushed
analysis beyond any useful function. Analysis is often valuable in breaking
a complex decision into component parts for clearer thinking. Analysis that
over the years does not predict decisions well or provide useful guidance to
clients is analysis that one might consider abandoning. When analysis is
pressed too far, the important process of synthesis can be neglected. An
overly analytical approach risks emphasis on some accidental singularity of
a given case, rather than seeking a decision in which all the elements of the
matter are integrated into an internally consistent and coherent whole.
Overanalysis also clouds insight into underlying principles and situational
senses that are conditions of dependable guidance and predictable decision.
The European and Japanese cases studied may suggest that tying can be
quite adequately considered within a somewhat more simplified doctrinal
framework.

What would U.S. tying doctrine look like if we put less emphasis on
opaque doctrinal questions and trusted more in the general assessment? Suppose the following approach:

- All tying arrangements would be examined under the rule of
  reason.

- The rule of reason analysis in a tying cases would present to
  the fact finder only two questions:

  (1) Can the plaintiff show that there are lower priced or
      higher quality goods available in the market which buyers
      would have purchased but for the arrangement. In Kodak, for
      example, such a showing was made. ISO services were in
some cases available at lower cost and at higher quality than Kodak services.

If the first question is answered, yes, plaintiff has made a prima facie case for tying. Note that the question subsumes questions of one or two products, power in the tying market and effect in the tied market. The fact finder cannot answer the question "yes" without some consideration of all three issues. They are not, however, stated as separate steps but as part of a search for a cohesive, sensible overall assessment. The second question becomes:

(2) Can the defendant show that the arrangement has competitively relevant justifications of sufficient magnitude as to justify the buyer constraints shown? To make this showing, the defendant would require proof of the needs for quality control, marketing or production economies generated by the tie, special reputational needs, etc.

The fact finder here not only determines which asserted justifications have been proved, but also weighs them against the degree of constraint found in answering question 1. This seems the route to a sensitive, fine-grained judgment rather than a simple conclusory outcome. In American tort law, it is like the advance in sensitivity one gets in moving from contributory negligence to comparative negligence.

Both the questions are stated as questions of fact, and the trier of fact would have the principal responsibility for making the determinations. Those would be subject to the court's usual power to decide factual issues itself when reasonable persons could not differ, or to decide the case on the law when there are no material facts in dispute.

Many students of U.S. antitrust law will resist such a proposal on the grounds that it would invite fact finders to engage in unwise degrees of speculation. Overlooking the question's heroic assumption that current U.S. doctrine does not invite such speculation, the proposed tests would seem to present more suitable issues to fact finders than the issues we give them today. The proposed factual issues are relatively less general and less ambiguous. They are more concrete, more within the everyday experience of fact finders, and are subject to more dispositive proof.

In Kodak, for example, the plaintiff showed that there were lower prices and higher quality services available in the market. Surely such
findings are easier for fact finders to work with than the esoteric question of whether parts and service are one or two products within the very specialized meanings those terms have in tying law, or whether the level of competition in the parts market should be judged by the level of competition in the machine market because of certain economic relationships claimed to exist. Similarly, defendants can submit proof in cases like *Kodak* about whether there are quality control or other justifications — all issues within the defendant’s power to show convincingly.

There is one feature of the proposal that needs a final comment. Beyond its coercion of buyers, tying has been condemned in U.S. antitrust law because ties were thought to foreclose sellers in the tied market. But this component of U.S. tying law has never been taken very seriously. All the plaintiff has ever had to show is that the effect in the tied market was “not insubstantial,” and this writer has not found a case in which the plaintiff lost on this ground. Moreover, U.S. antitrust law has not in recent times been comfortable with doctrines seemingly aimed at producer welfare. For these reasons, the proposal advanced here simply leaves that element out as an explicit requirement. Instead, the showing that but for the tie the plaintiff would have been able to purchase the tied product at a lower price seems to imply enough foreclosure to meet any requirement of the Sherman or Clayton acts. Where the defendant has some significant market power in the tied market, of course, an attempt to monopolize claim might be asserted by a foreclosed seller, and in that litigation the degree of foreclosure might be relevant to liability or damages. But for tying cases, foreclosure seems a useless analytical step.

The proposal would improve the guidance which counselors need and today fail to get from judicial opinions. The European and Japanese models examined suggest that the fewer the steps in the analysis, and the degree to which each of the steps is capable of proof with proofs of relatively low level abstraction, the better the judicial guidance will be. Perhaps the low water mark of effective judicial guidance in tying was the Court’s several opinions in *Jefferson Parish* where members of the Court could not agree on whether there was one product or two, on whether there was sufficient power in the tying market and even on whether the issues were being considered under a per se or a rule of reason framework. Surely we can expect

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76 See supra note 37 and accompanying discussion.
better guidance from our courts than that. The proposal advanced here, informed by the European and Japanese approaches to tying, holds some promise toward that end.