# UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

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XEROX CORPORATION,

Plaintiff-Counterclaim Defendant,

- against -

MEDIA SCIENCES, INC.,

Defendant-Counterclaim Plaintiff,

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AND RELATED COUNTERCLAIMS.

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Richard J. Holwell, District Judge:

This litigation involves solid ink sticks used in plaintiff-counterclaim defendant Xerox Corp.'s phase change color printers. In the principal action, Xerox asserted a single claim against defendant-counterclaim plaintiff Media Sciences Inc. ("MSI") for MSI's alleged infringement of patents relating to Xerox's ink sticks and printer feed chutes. MSI manufactures generic ink sticks for Xerox's color printers and sells them in direct competition with Xerox. It asserted a number of counterclaims, including antitrust claims for actual and attempted monopolization in violation of § 2 of the Sherman Act. For reasons discussed below, the Court previously dismissed most of the antitrust claims without prejudice. Xerox now moves for summary judgment on MSI's remaining counterclaims, which allege that Xerox has monopoly power in the aftermarket for replacement ink sticks and has illegally maintained that power by making frequent and unnecessary changes to the design of its ink sticks and its printers' feed channels. For the reasons that follow, the motion will be granted.

1:06-cv-04872-RJH

# MEMORANDUM OPINION AND ORDER

## I. BACKGROUND

Unless otherwise noted, the following facts are undisputed.

### A. The Market for Color Workgroup Printers and Ink Sticks

Xerox manufactures a variety of workgroup printers, including laser printers, phase change color printers, and multi-function devices—devices that scan and copy as well as print. Xerox's phase change color printers use solid, waxy ink to produce an image on paper. The ink is sold in a solid form that looks and feels like a crayon. (*See* Kerr Rep. ¶ 22-23, Herbert Decl. Ex. 9, July 7, 2008.)

As is true of other printers manufacturers, Xerox generally sells its printers at a low margin or a loss, hoping to earn a profit through later sales of high-margin ink. (Kerr Rep. ¶ 32; *see generally* Richard B. McKenzie, *Why Popcorn Costs So Much at the Movies and Other Pricing Puzzles*, cp. 7 (2008); Claudia H. Deutsch, *In a Switch*, *Charging More for Printers and Less for Ink*, N.Y. Times, Sept. 24, 2007, at C3.) Thus while Xerox's price-to-cost margin for ink is approximately ninety percent (Kerr Rep. ¶ 71; Economides Rep. ¶ 37, Herbert Decl. Ex. 4), its combined gross margin on phase change printers and supplies is approximately thirty-seven percent (Kerr Rep. ¶ 75 & Ex. 20). This business model invites competition; because of the gap between the price of ink and its marginal cost of production, there is an obvious opportunity for a competitor to undercut Xerox's ink prices and take away a portion of the ink-stick market. In the United States, MSI provides just such competition. It manufactures generic ink sticks for Xerox's printers and sells them at a substantial discount off Xerox's prices. (Economides Rep. ¶ 7; *see* Kerr Rep. ¶ 38.)

Certain facts concerning the markets in which Xerox and MSI compete are undisputed. In the "primary" market for printers, Xerox competes with a number of original equipment manufacturers, including Hewlett Packard ("HP"), Lexmark, and Okidata. (Kerr Rep. ¶ 28.)<sup>1</sup> Xerox's share of total revenues in this market is approximately twenty-four percent. (Kerr Report Ex. 7.) MSI has conceded, and the record overwhelmingly suggests, that "Xerox lacks market power in the primary market for color printers . . . ." (MSI Resps. to Pl.'s Second Set of Interrogs. ¶ 22; *see also* MSI Countercls. ¶ 44; Kerr Rep. ¶¶ 30, 50.)

Conditions are different in the "aftermarket" for ink sticks for Xerox's printers. The parties quibble over precise numbers, but Xerox controls at least ninety percent, and may control up to ninety-seven percent, of ink-stick sales for its color workgroup printers. (Xerox's Resps. to MSI's R. 56.1 Stmt. ¶ 37.) MSI claims that Xerox's position as the dominant ink supplier for its printers is not accidental. In addition to its natural advantage as an original equipment manufacturer, Xerox changes the design of its printers' feed chutes with each new generation of printer, which has the effect of making it more difficult for non-Xerox ink sticks to function properly. (*Id.* ¶ 101.) Xerox contends that these design changes improve the efficiency and quality of its printers' output and are necessary to block incompatible ink sticks, including ink sticks that it manufactured for other models of its printers. (*Id.*) MSI contends that the principal purpose of the design changes is to make non-Xerox ink sticks function less reliably. (*Id.*)

<sup>&</sup>lt;sup>1</sup> The parties distinguish "workgroup" color printers—those intended for higher-volume business use—from lower-cost color ink-jet printers.

The parties draw different conclusions about the significance of the competitive nature of the primary market for printers in analyzing the nature of competition in the secondary market for ink sticks. MSI's expert, Professor Nicholas Economides, views the primary and secondary markets as worlds apart, each having little or no impact on the other. He opines that "ink for each particular Xerox printer model" is a distinct antitrust market within which Xerox possesses monopoly power, i.e., "the power to control prices or exclude competition." (Economides Rep. ¶ 35; see United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377, 391 (1956).) Professor Economides notes that printers and ink are not substitutes; a consumer shopping for a printer obviously would not buy ink in its place. (Economides Rep. ¶ 33.) In addition, the purchase of a printer requires a sizeable expenditure—up to 3,100, for a multi-function device. (See ¶ 35.) Thus, Professor Economides opines that a consumer who has purchased a Xerox printer is "locked-in" "in the sense that [she] cannot easily and costlessly change printers if the realized prices of post-printer-purchase ink are high or higher than expected" (*id.*), and that Xerox can and does exact monopoly rents from such consumers (see  $\P$  38). MSI contends that a survey response produced from Xerox's files provides compelling evidence of Xerox's monopoly power. (See MSI Mem. 9-10.) In this document, a customer complains that although he is dissatisfied with the print quality of his Xerox printer, there is little he can do because he does not want to forfeit his upfront investment. (Iburg Dep. Ex. 2, at 5.)

MSI sees other signs that Xerox possesses monopoly power in the ink-stick aftermarket. Xerox has raised its ink prices three times since 2000: in 2003, by an average of 4.03%; in 2006, by an average of 5.35%; and in 2007, by an average of

4.87%.<sup>2</sup> There is no evidence, however, of any corresponding drop in printer sales. (Economides Rep. ¶ 50; Iburg Dep. 67-68, Herbert Decl. Exs. 5, 6; Draz Decl. 2-5, Apr. 28, 2009.) In MSI's view, this indicates that the ink-stick and printer markets are not integrated, and that the alleged competition in the printer market fails to discipline Xerox's pricing decisions in the ink-stick market. MSI also disputes Xerox's claim that consumers are able to calculate the lifecycle costs of purchasing and operating a color printer. (Economides Rep. ¶ 45.) MSI contends that in the absence of such information, Xerox is better able to maintain monopolistic ink-stick prices.

Xerox denies that it possesses monopoly power in any relevant market. Its expert, Dr. William Kerr, does not dispute that Xerox sells most of the ink sticks used in its printers. But he believes this is not probative of Xerox's alleged monopoly power, because "[t]he relevant market in which to consider the competitive effects of Xerox's ... product design activities, is the market for workgroup color printing," i.e., the *integrated* market for color printers and ink sticks. (Kerr Rep. ¶ 27.)

Dr. Kerr further contends that even if ink sticks for Xerox printers are considered a separate product market, there is no reason to conclude that Xerox possesses monopoly power in that market. Printers generally have a three-year life span, and large customers are likely to be purchasing printers "all the time." (¶¶ 69, 70.) In addition, Xerox and other OEMs ("original equipment manufacturers") market their printers on a "cost per page" basis and thus explicitly encourage customers to consider the lifecycle costs of a printer purchase. (¶ 23; *see, e.g.*, ConsumerReports.org, Buying Advice: Printers (June

<sup>&</sup>lt;sup>2</sup> Total inflation during this period was approximately 13%. (*See* Bureau of Labor Statistics, Inflation Calculator, http://www.bls.gov/data/inflation\_calculator.htm (last visited Sep. 24, 2009).)

20, 2008) ("Consider supply costs as well as a printer's price."), Ko Decl. Ex. 48, June 20, 2008.).) Dr. Kerr therefore infers a market dynamic whereby competition in the primary printer market constrains Xerox's ability to charge supracompetitive prices for ink sticks. If Xerox were to charge supracompetitive prices, it would be punished with reduced sales in the primary printer market. (Kerr Rep. 58.)

Aside from these general features of the printer and ink-stick markets, Dr. Kerr contends that Xerox's actual pricing practices contradict the suggestion that it has the power to control prices or exclude competition. When a new printer model is introduced, Xerox determines the price it charges for ink by reference to the market prices for toner used in its competitors' color laser printers. (Kerr. Rep. ¶ 56.) Janel Draz, a Xerox marketing manager, submitted a sworn declaration in which she avers that when Xerox considers changing the price of ink after a particular model of printer is introduced, it aims to stay competitive with the prices HP and Lexmark charge for color toner. (Draz Decl ¶ 4, Apr. 28, 2008.) Contemporaneous internal documents are consistent with Ms. Draz's account. (*See id.* Exs. I, L, O.)

### **B.** Procedural History

As noted, Xerox filed its complaint on June 23, 2006. The complaint asserted a single claim based on MSI's alleged infringement of patents relating to the design of Xerox's ink sticks and printer feed chutes. (Compl. ¶¶ 9-17.) MSI responded by filing a number of counterclaims, including counterclaims alleging that Xerox's efforts to deter third-parties from manufacturing ink sticks for its printers violated § 2 of the Sherman Act, 15 U.S.C. § 2 (2006).

By memorandum opinion and order dated September 14, 2007, the Court denied Xerox's motion to dismiss MSI's § 2 counterclaims. After reviewing the complaint and the applicable legal standards, the Court found that MSI had adequately pled: (i) claims based on Xerox's decision to change, and patent, the design of its ink sticks to prevent competition from non-Xerox ink manufacturers; and (ii) separate claims based on changes to Xerox's loyalty rebate programs that rewarded distributors and resellers who agreed not to sell non-Xerox ink. *Xerox Corp. v. Media Sciences, Int'l, Inc.*, 511 F. Supp. 2d 372, 387-90 (S.D.N.Y. 2007) (*"Xerox I"*).

At the close of discovery, Xerox moved for summary judgment on MSI's § 2 claims on two separate grounds. Xerox first argued that claims based on changes to Xerox's loyalty rebate program fell within the scope of a prior settlement agreement in which MSI covenanted not to assert any claims against Xerox for conditioning rebates on a reseller or distributor not selling MSI ink, provided that Xerox had a good faith belief that MSI's ink was causing printer failures. *See Xerox Corp. v. Media Sciences, Inc.*, 609 F. Supp. 2d 319, 322 (S.D.N.Y. 2009) ("*Xerox II*"). The Court found that MSI's counterclaims fell within the scope of the settlement agreement, and that the settlement agreement did not violate public policy. *Id.* at 324-25, 327. Accordingly, the Court dismissed claims arising out of changes to Xerox's loyalty rebate program without prejudice pending an arbitration required by the settlement. *Id.* at 328.<sup>3</sup> With respect to MSI's claims challenging Xerox's decision to change the design of its ink sticks, Xerox argued, based on facts not in dispute, that MSI is unable to show that Xerox possesses monopoly power in a relevant market, that MSI cannot point to anticompetitive effects in

<sup>&</sup>lt;sup>3</sup> Consistent with the terms of the settlement agreement, the Court did not consider evidence related to Xerox's loyalty rebate programs in deciding this motion.

the alleged ink-stick market, and that MSI cannot point to evidence that Xerox's design changes foreclosed competition. That motion is the subject of this opinion.

### II. DISCUSSION

Federal Rule of Civil Procedure 56 provides that "[a] party claiming relief may move, with or without supporting affidavits, for summary judgment on all or part of the claim." Fed. R. Civ. P. 56(a). A defendant may satisfy its burden of production under the rule simply by pointing out the lack of evidence supporting a material element of a non-moving plaintiff's claim. *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986). Thereafter, the plaintiff "must . . . set out specific facts showing a genuine issue for trial." Fed. R. Civ. P. 56(e)(2). "Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no 'genuine issue for trial." *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *see* Fed R. Civ. P. 56(c).

#### A. Monopoly Power in a Single-Brand Aftermarket: *Kodak*-type Claims

Section 2 of the Sherman Act declares it unlawful to "monopolize" or "attempt to monopolize" "any part of the trade or commerce among the several States." 15 U.S.C. § 2. To demonstrate monopolization of a "part of trade or commerce," a plaintiff must prove "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966). "[T]o demonstrate attempted monopolization a plaintiff must prove (1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous

probability of achieving monopoly power." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993). Establishing a "dangerous probability of achieving monopoly power" requires proof that the defendant possesses economic power in a relevant market. *See id.* Thus, in cases that turn on the extent of a defendant's economic power, monopolization and attempted monopolization may be analyzed in parallel.

"Monopoly power is the power to control prices or exclude competition." E. I. du *Pont*, 351 U.S. at 391. More particularly, it is the power "to charge a price higher than the competitive price without inducing so rapid and great an expansion of output from competing firms as to make the supercompetitive price untenable." Am. Academic Suppliers, Inc. v. Beckley-Cardy, Inc., 922 F.2d 1317, 1319 (7th Cir. 1991). Monopoly power may be established through direct evidence that a firm controls prices or excludes competition, or, more commonly, through evidence that a firm controls a large share of the relevant market. Tops Markets, Inc. v. Quality Markets, Inc., 142 F.3d 90, 98 (2d Cir. 1998). Although some cases have found that evidence of large market share created a genuine issue for trial, compare Geneva Pharms. Tech. Corp. v. Barr Labs. Inc., 386 F.3d 485, 501 (2d Cir. 2004) (evidence of eighty-five percent market share over fifteen months demonstrated genuine issue for trial), with Tops Markets, 142 F.3d at 99 (evidence of seventy percent market share did not demonstrate genuine issue for trial absent other indicia of monopoly power), a number of additional factors remain relevant to whether a firm possesses monopoly power. These include the strength of competition, the probable development of the industry, and consumer demand. Hayden Publ'g Co., Inc. v. Cox Broad. Corp., 730 F.2d 64, 68-69 (2d Cir. 1984).

In the context of § 2, a "relevant market" has two dimensions: the geographic market and the product market. *See Brown Shoe Co. v. United States*, 370 U.S. 294, 324 (1962). The parties agree that the relevant geographic market is the United States. (*See* MSI Countercls. ¶ 44; Kerr Rep. ¶¶ 28-30.) Thus, only the relevant product market is at issue in this motion. The goal in defining this market "is to identify the market participants and competitive pressures that restrain an individual firm's ability to raise prices or restrict output." *Geneva Pharms.*, 386 F.3d at 496. As a general rule, products constitute part of a single product market if they are "reasonably interchangeable by consumers for the same purposes," such that there is high cross-elasticity of demand for the products. *E.I. du Pont*, 351 U.S. at 380, 395.

As the Supreme Court has instructed, the application of these general principles is informed by additional factors in cases involving the market for parts or services for a durable good—a phenomenon referred to as a "single-brand aftermarket." *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451 (1992). On one hand, it may be appropriate to conceive of the relevant market as broader than the market for parts or service, because consumers view the primary-market good and aftermarket parts or service as constituents of a single product market. *See SMS Systems Maint. Servs., Inc. v. Digital Equip. Corp.*, 188 F.3d 11, 17 (1st Cir. 1999) (holding that integrated market consisting of primary equipment and replacement goods and service is relevant market; "large market share [in the aftermarket] without more, does not suffice to establish that the manufacturer enjoys monopoly power"); *PSI Repair Servs., Inc. v. Honeywell, Inc.*, 104 F.3d 811, 819-20 (6th Cir. 1997) (primary market and aftermarket comprise single relevant product market). Alternatively, traditional indicia of interchangeability of goods

may suggest a relevant market restricted to replacement parts, but which is constrained by competition in the primary market. See Harrison Aire, Inc. v. Aerostar Int'l, Inc., 423 F.3d 374, 382 (3d Cir. 2005) ("If the primary market is competitive, a firm exploiting its aftermarket customers ordinarily is engaged in a short-run game—for when buyers evaluate the 'lifecycle' cost of the product, the cost of the product over its full service life, they will shop elsewhere."), cert. denied, 547 U.S. 1020 (2006); Parts & Elec. Motors, Inc. v. Sterling Elec., Inc., 866 F.2d 228, 236 (7th Cir. 1988) (Posner, J., dissenting) (same). Whether a court focuses on traditional "market definition" under Brown Shoe or "market power" under Kodak, "the ultimate inquiry is the same—whether competition in the equipment market will significantly restrain power in the service and parts markets." Kodak, 504 U.S. 451 at 470 n.15. Accordingly, while evidence that a single firm controls a large share of a relevant market is generally sufficient to establish a reasonable inference of monopoly power at summary judgment, the analysis is substantially different in cases involving alleged monopolization of a single-brand aftermarket.

In *Kodak*, this interesting issue of monopoly power involved the aftermarket for parts and service for copying and micrographic equipment manufactured by the Eastman Kodak Co. *See Kodak*, 504 U.S. 451. After independent service organizations ("ISOs") began servicing equipment manufactured by Kodak, Kodak adopted policies that limited the ISOs' ability to obtain replacement parts and made it more difficult for ISOs to compete with Kodak's repair services. Kodak intended to, and did, force many ISOs out of business. *See id.* at 458. As relevant here, the ISOs contended that Kodak had unlawfully monopolized and attempted to monopolize the market for parts and service for

Kodak equipment in violation of § 2 of the Sherman Act. *Id.* Kodak responded with a purely economic argument—that "evidence of competition in the equipment market '*necessarily* precludes power in the derivative market." *Id.* at 461.

As a theory, Kodak's argument was not without persuasive force. While a manufacturer can be expected to have a dominant share of the market for service or replacement parts for its products, it would be short-sighted in the extreme to price-gouge aftermarket customers, at least in situations where the primary market is competitive and dissatisfied customers can switch to a competitor's product. The economically rational firm concerned with the long term "cannot afford to bite the hands that feed them." *SMS*, 188 F.3d at 16 (citing 10 Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 1740, at 153 (1996) ("Areeda")).

Nevertheless, the Supreme Court rejected Kodak's invitation to decide the case on the basis of "formalistic distinctions rather than actual market realities," and found that the plaintiff ISOs had introduced sufficient evidence of Kodak's monopoly power in the parts and services aftermarket to withstand summary judgment. *Kodak*, 504 U.S. at 467-68. The Court noted that the ISOs had proffered evidence that: (i) customers were "locked-in" because of the high costs of switching to an alternate supplier of copying and micrographic equipment, *id.* at 477; (ii) significant "information costs" prevented customers from learning the total lifecycle cost of owning Kodak equipment before making a purchase decision, *id.* at 473; (iii) Kodak changed its policies after customers were locked-in by an equipment purchase, *id.* at 458; (iv) Kodak charged supracompetitive prices for parts and service to its locked-in customers, *id.* at 470; and (v) Kodak dominated the parts and service aftermarket, *id.* at 481. Together, this

evidence supported a reasonable inference that Kodak possessed monopoly power in a distinct market for parts and services, which precluded summary judgment.

Since the Supreme Court decided *Kodak*, the Courts of Appeals have unanimously held that to prevail on a *Kodak*-type claim, a plaintiff must make an evidentiary showing similar to that made by the plaintiff ISOs. *See, e.g., Harrison Aire,* 423 F.3d at 384; *SMS*, 188 F.3d at 17; *PSI Repair Servs.*, 104 F.3d at 821; *Alcatel USA, Inc. v. DGI Techs., Inc.*, 166 F.3d 772, 782-84 (5th Cir. 1999); *see also Commercial Data Servers, Inc. v. Int'l Bus. Machs. Corp.*, 262 F. Supp. 2d 50, 63-71 (S.D.N.Y. 2003); 10 Areeda ¶ 1740, at 116-150; Comment, *Tying – Market Power at Summary Judgment*, 106 Harv. L. Rev. 328, 335-38 (1992). In particular, courts have held that to withstand a properly supported motion for summary judgment, a plaintiff must proffer "hard evidence dissociating the competitive situation in the aftermarket from activities occurring in the primary market." *Harrison Aire*, 423 F.3d at 383 (quoting *SMS*, 188 F.3d at 17).) MSI disagrees with this interpretation of *Kodak*. (MSI Mem. 6). But it is well-supported, both as an understanding of the proper summary judgment burdens and as a question of antitrust policy.

Procedurally, the plaintiffs in *Kodak* introduced substantial evidence of a distinct market for parts and services that was unconstrained by competition in the primary equipment market. *See supra* p. 12. Thus, the Court's statement that Kodak bore "a substantial burden" in showing that it was entitled to summary judgment, 504 U.S. at 469, is best understood as indicating that summary judgment was appropriate only if Kodak could prove its rebuttal case (*viz.*, that it lacked monopoly power because of conditions in the primary market) as a matter of law. This understanding of *Kodak* is

consistent with generally applicable summary judgment principles, under which a moving defendant may satisfy its burden of production by pointing out the absence of evidence supporting a material element of the non-moving plaintiff's claim. *See Celotex*, 477 U.S. at 324. MSI's interpretation, by contrast, would require a defendant to affirmatively disprove an element of the plaintiff's claim—an understanding of summary judgment that has not prevailed since *Adickes v. S. H. Kress & Co.*, 398 U.S. 144 (1970).

As a question of antitrust policy, "courts have been careful to avoid constructions of § 2 which might chill competition rather than foster it." *Spectrum Sports*, 506 U.S. at 448. The anti-competitive effects of requiring a defendant to disprove its monopoly power, however, are palpable. "Every first mover into a new market has a monopoly during its initial period of exclusivity . . . ." *Geneva Pharms*., 386 F.3d at 501. Under MSI's proposed rule, any firm that developed a new durable good could be subjected to the burden of trial on claims alleging that it monopolized an aftermarket of its own creation.

The burden a plaintiff must shoulder to prevail on a *Kodak*-type claim is illustrated by the Third Circuit's careful opinion in *Harrison Aire*, 423 F.3d 374. The plaintiff in that case alleged that the defendant, a hot air balloon manufacturer, possessed monopoly power in the aftermarket for replacement fabric for its balloons. The top half of a hot air balloon's envelope deteriorates more rapidly than the bottom half, thus the owner of a balloon can extend the balloon's service life by replacing the top part. *See id.* at 378. The alleged monopolization resulted from the defendant manufacturer's misrepresentation that using a third party's replacement fabric would render its balloons.

unairworthy. *See id.* The plaintiff contended that because of this misrepresentation, it was forced to buy replacement fabric at unnecessarily high prices.

Construing the summary judgment record in the light most favorable to the plaintiff, the court initially held that the relevant market was that for replacement fabric for the defendant manufacturer's balloons. *Id.* at 383. The defendant, however, did not possess monopoly power in this market. Although it appears to have been the dominant manufacturer of replacement fabric for its balloons, *see id.* at 379, this did not support a reasonable inference of monopoly power, because balloons and fabric are "linked by consumer demand such that competition in the foremarket may discipline behavior in the aftermarket." *Id.* at 383. And, in contrast to *Kodak*, the plaintiff failed to produce evidence of information costs that prevented knowledgeable customers from engaging lifecycle pricing, of a change in aftermarket policy targeting locked-in customers, of supracompetitive pricing, or of dominant aftermarket share. *See id.* at 384. Thus, the court found that summary judgment for the defendant was proper.

A similar result obtained in *Alcatel*, 166 F.3d 772. The antitrust defendant there manufactured telephone switching systems that used expansion cards to provide additional functionality, such as added capacity to route telephone calls. *See id.* at 777. The plaintiff produced expansion cards that competed with cards manufactured by the defendant. *See id.* at 778. After the defendant began to enforce licensing provisions that prohibited customers from using third-party expansion cards, the plaintiff asserted claims for monopolization and attempted monopolization under § 2 of the Sherman Act. It contended that the relevant market was the market for "expansion products compatible with [the defendant's] switches." *Id.* at 779.

The Fifth Circuit held, reversing a jury's verdict, that the plaintiff failed to demonstrate monopoly power in a relevant market. In contrast to *Kodak*, prices for most of the defendant's expansion cards were established at the time a customer purchased a switch. *Id.* at 783. Hence many consumers "factor[ed] in not only the purchase price of the equipment, but also the post-acquisition costs of operation, maintenance, and expansion at the time of purchase." *Id.* In addition, the defendant had long maintained restrictive policies prohibiting the use of third-party expansion cards. *Id.* Thus, the plaintiff could not demonstrate that the defendant "changed its policy after locking-in some of its customers." *Id.* (quoting *PSI Repair Servs.*, 104 F.3d at 820). In the face of this evidence, plaintiff could not prevail on its § 2 claim.

While the Court reads *Kodak* to mandate a flexible inquiry into whether market imperfections allow an alleged monopolist to exert economic power in a single-brand aftermarket, *see Harrison Aire*, 423 F.3d at 374-75, a common thread runs through the post-*Kodak* decisions. Read together, these cases establish that for a nonmonopolist producer of a durable good to be held to have monopoly power in the aftermarket for parts, service, or supplies, a plaintiff generally must show that (i) customers who own the good are "locked in" by the prohibitive costs of switching to an alternate product, and (ii) the lock-in permitted those customers to be exploited, either because (a) some limitation on information undermined their ability to know that the aftermarket goods and services were being sold at high prices, or (b) the defendant changed its aftermarket prices after the lock-in occurred. *See* Herbert Hovenkamp, *The Rationalization of Kodak*).

## B. MSI Has Failed to Meet its Burden Under Kodak

Turning to this case, it is helpful to begin by noting a point of similarity with *Kodak*. Like Kodak, Xerox sells durable goods in a competitive primary market (printers) and is the dominant supplier of aftermarket supplies (solid ink sticks) for those goods. Furthermore, "[s]olid ink sticks are, literally and technically, not interchangeable with other consumables." *Xerox I*, 511 F. Supp. 2d at 384. Thus, the Court believes that the relevant market may be defined as the market for replacement ink sticks for Xerox's color workgroup printers—printers and ink sticks are complements, not substitutes. *See Kodak*, 504 U.S. at 481-82; *Harrison Aire*, 423 F.3d at 383. Under a traditional analysis, this would be sufficient to define the parameters of the market in which Xerox allegedly possesses monopoly power, and probably would create a triable issue as to whether Xerox possesses such power. *See Geneva Pharms.*, 386 F.3d at 501-02.

As noted above, however, "[c]ases involving aftermarkets are sui generis." *SMS*, 188 F.3d at 16; *see supra p.* 10-11. Accordingly, the Court turns to whether MSI has met its burden of showing that customers who already own a Xerox printer are locked in by the high cost of migrating to a non-Xerox printer, and whether this alleged lock-in allowed Xerox to exploit its customers, either because limitations on the availability of information prevented customers from knowing the total cost of owning a Xerox printer, or because Xerox charged supracompetitive prices after the lock-in occurred.

Beginning with the logically antecedent question of lock-in, the record contains no evidence of a substantial lock-in effect arising from the cost of migrating to a non-Xerox printer. MSI relies on the \$3,100 price of certain Xerox printers, and a survey response, described above, in which a single user complains that he was "stuck" with a

Xerox printer that "died within three weeks after receipt." (MSI Mem. 9-10; see Iburg Dep. Ex. 2, at 5.) But on its own, this evidence is not probative of whether Xerox has the ability to set ink-stick prices without regard to competitive consequences. The significance of the \$3,100 price tag depends entirely on individual users' cost structures. All other things being equal, an economically rational user will switch to an alternate printer in response to changes in the cost of supplies if the savings from the alternate printer's cheaper supplies outweigh the additional cost of a new equipment purchase. See Parts & Elec. Motors, 866 F.2d at 236 (Posner, J., dissenting). MSI, however, offers no evidence of actual user behavior in the market for color workgroup printers. In particular, MSI offers no evidence that the typical business user will be deterred from switching printing platforms because of prohibitive printer costs. And it overlooks the effect of color printers' three-year useful life, which offers users the ability to switch to a new printing platform without additional equipment costs. In the face of this evidentiary shortcoming, the Court has no non-speculative basis for concluding that the cost of a new printer assumed by the parties (\$3,000, spread over a three-year useful life), is so large that it locks in Xerox's customers. As for the survey response, *Kodak* contemplates that "a substantial number of customers [be] substantially locked in." 10 Areeda ¶ 1740, at 133. On that question, the survey response proffered by MSI has vanishingly small probative value, as evidenced by other survey responses in which dissatisfied Xerox customers threaten to stop using Xerox printers in light of their high cost-per-page.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> One such response provides a real-world example of the economic theory advanced by petitioner-defendant in *Kodak*. It reads: "The phaser is one of the **biggest mistakes in equipment purchasing I've ever made**. It makes strange noises all the time, is **unreliable**, and the ink sticks are far too expensive. I would NEVER buy one again or recommend one to anyone else." (Iburg Dep. Ex. 2, at 5 (emphasis in original).)

*See Kodak*, 504 U.S. at 475-76; *SMS*, 188 F.3d at 21 (rejecting anecdotal testimony of two customers that migrating to alternative platform would be costly; "[a] lock-in phenomenon must be shown, not assumed"); *cf. K.M.B. Warehouse Distribs., Inc. v. Walker Mfg. Co.*, 61 F.3d 123, 128 (2d Cir. 1995) (rejecting "isolated statements of preference" as evidence of adverse effect on competition).

With regards to whether information costs prevent potential Xerox customers from engaging in lifecycle pricing, the evidence cited by MSI is, again, minimally probative. A product's "lifecycle" cost refers to the cost of operating the product over its useful life. In *Kodak*, the Court reasoned that competition in the primary equipment market might not discipline Kodak's pricing decisions in the aftermarket, because customers required "a substantial amount of raw data" to engage in lifecycle pricing, 504 U.S. at 473; this information was not available at the time of the initial equipment purchase, *id.* at 473-74; and some customers chose to remain ignorant of lifecycle costs, *id.* at 474-75. The Court also noted that lifecycle pricing by large organizations did not necessarily discipline Kodak's aftermarket pricing decisions, because Kodak may have discriminated in price between sophisticated customers who considered the total economic cost of owning a piece of equipment, and unsophisticated customers who looked only at the initial cost of an equipment purchase. *See id.* at 475-76. Drawing on the Court's analysis, MSI posits a similar market failure in the ink-stick aftermarket. It

In addition to the evidence discussed in the text, Dr. Economides opines that "Xerox printer owners are locked-in because (a) of high switching costs of buying a new printer; and (b) of the long useful life of printers." (Economides Rep. ¶ 45.) As this assertion is unsupported by data or analysis, it fails to create a genuine issue for trial. *See Major League Baseball Props., Inc. v. Salvino, Inc.*, 542 F.3d 290, 311 (2d Cir. 2008) ("An expert's opinions that are without factual basis and are based on speculation or conjecture are . . . inappropriate material for consideration on a motion for summary judgment.").

notes that some consumers do not consider the total cost of owning a Xerox color workgroup printer, and that lifecycle costs can be difficult to predict, because they vary depending on printer use and repair costs. (MSI Mem. 7-9.)

This evidence is insufficient to establish the type of market failure critical to a *Kodak*-type claim. Insofar as ignorant customers are concerned, *Kodak* teaches that the relevant question is whether some feature of the market prevents knowledgeable customers who would otherwise constrain the exercise of an alleged monopolist's economic power from performing this checking function. See Harrison Aire, 423 F.3d at 382 ("Perfect information is not required for the primary market to check the aftermarket."); SMS, 188 F.3d at 19 n.3 ("[T]he focus should be on whether the primary market is in possession of information that sufficiently reveals the anticompetitive tendencies of a manufacturer in its aftermarket."); 10 Areeda ¶ 1740, at 137-38. MSI, however, has not presented any evidence from which a reasonable trier of fact could infer that this has occurred in the ink-stick aftermarket. In contrast to *Kodak*, there is no evidence that a "substantial amount of raw data" is necessary to estimate the lifecycle costs of a Xerox printer, that information concerning ink-stick prices is not readily available, or that Xerox discriminates in price between sophisticated and unsophisticated customers. Cf. Kodak, 504 U.S. at 472-75. To the contrary, Xerox has submitted substantial evidence that lifecycle pricing information is readily available, and that it competes with other OEMs on a cost-per-page basis. (See supra p. 5.) MSI dismisses this evidence, arguing that cost-per-page is only part of a printer's lifecycle cost. But even assuming that variable usage patterns and repair costs introduce some uncertainty into customers' lifecycle pricing, the Court fails to see how this is relevant under Kodak.

The information deficit that worried the Court arose from Kodak's anti-competitive business practices, not the common human inability to predict the future with certainty.

Turning to whether Xerox charged supracompetitive prices to locked-in customers, Xerox has introduced substantial uncontested evidence that its ink-stick prices have decreased on a cost-per-page basis, and that the supply of color workgroup printers and aftermarket supplies increased markedly between 2000 and 2007. (See Kerr. Rep. ¶¶ 23, 46-51.) Against this backdrop, the evidence cited by MSI fails to support a reasonable interference of supracompetitive pricing. MSI notes that Xerox has raised ink-stick prices three times, yet cannot point to any changes in its cost structure that would justify such an increase. (MSI Mem. 14.) But Xerox's inability to offer a cost justification for its price increases is only tangentially relevant to whether its prices are competitive. While an abnormally high price-cost margin may signal the absence of competition under perfect market conditions, see Geneva Pharms, 386 F.3d at 500, MSI has not shown that Xerox's low costs resulted in consumers being charged supracompetitive prices. See PepsiCo, Inc. v. Coca-Cola Co., 315 F.3d 101, 108-09 (2d Cir. 2002). MSI also has not attempted to show why Xerox's price-cost margin should be measured on the basis of ink-stick sales, rather than combined ink-stick and printer sales. However, any firm begins to look like a monopolist if loss-generating parts of its business are disregarded. MSI notes that Xerox did not change its prices in response to changes in MSI's prices. (See MSI Mem. 14.) But without accounting for potentially confounding variables, this hardly supports a reasonable inference of supracompetitive pricing. "Competitive markets are characterized by both price and quality competition, and a firm's comparatively high price may simply reflect a superior product." Harrison

Aire, 423 F.3d at 381. Therefore, "a reasonable finder of fact cannot infer monopoly power just from higher prices." *Blue Cross & Blue Shield United v. Marshfield Clinic*, 65 F.3d 1406, 1411-12 (7th Cir. 1995). On this record, a reasonable trier of fact could not conclude that Xerox's ink-stick prices are supracompetitive.

Lastly, it is notable that with the exception of three price increases that actually failed to keep pace with inflation, MSI has not produced evidence of a change in policy by Xerox that exploited locked-in customers. *See PSI Repair Servs.*, 104 F.3d at 820 ("By changing its policy after its customers were 'locked in,' Kodak took advantage of the fact that its customers lacked the information to anticipate this change. . . . In our view, this was the evil condemned by the Court and the reason for the Court's extensive discussion of information costs."); *Digital Equip. Corp. v. Uniq Digital Techs., Inc.*, 73 F.3d 756, 763 (7th Cir. 1996) ("The material dispute that called for a trial was whether the change in policy enabled Kodak to extract supra-competitive prices from customers who had already purchased its machines."). While the Court believes that a policy change may not be strictly necessary to a *Kodak*-type claim, *see Harrison Aire*, 423 F.3d at 374-75, the absence of such a change weighs against any inference that Xerox possesses monopoly power.

Considering these factors together, MSI has not met its summary judgment burden. Although Xerox sells most of the ink for its printers, "[a]dditional factors are relevant in the aftermarket context." *Harrison Aire*, 423 F3d at 381. As to those factors, MSI has not proffered any evidence tending to show that Xerox exercises monopoly

power. Accordingly, a reasonable trier of fact could not find that Xerox possesses monopoly power in the market for ink sticks for its color workgroup printers.<sup>5</sup>

# C. MSI's Remaining Arguments

Two of MSI's responses to this line of analysis deserve a brief response. First, MSI contends that the premise of the Court's analysis, that the market for color workgroup printers is competitive, is erroneous. Specifically, MSI notes that according to figures produced by Dr. Kerr, the Herfindahl-Hirschman Index (a measure of market concentration) for the color workgroup printer market is a relatively high 3,982, and that Xerox has waffled over whether data showing that it has a twenty-four percent share of the workgroup printer market improperly includes sales of low-end color inkjet printers. (MSI Mem. 11-12.) MSI, however, conceded in its pleadings and discovery responses that Xerox lacks market power in the primary market (MSI Countercls. ¶ 43; MSI Resps. to Pl.'s Second Set of Interrogs.  $\P$  22), and never alleged in the alternative that Xerox possesses monopoly power in that market, see Fed. R. Civ. P. 8(d)(2). In the Court's view, Xerox was entitled to rely on MSI's concession, which defined the scope of subsequent discovery and motion practice. See Gibbs ex rel. Estate of Gibbs v. CIGNA Corp., 440 F.3d 571, 578 (2d Cir. 2006) ("Facts admitted in an answer, as in any pleading, are judicial admissions that bind the defendant throughout this litigation."); Bellefonte Re Ins. Co. v. Argonaut Ins. Co., 757 F.2d 523, 528 (2d Cir. 1985) ("A party's assertion of fact in a pleading is a judicial admission by which it normally is bound throughout the course of the proceeding.").

<sup>&</sup>lt;sup>5</sup> In view of this conclusion, the Court does not reach the question of whether Xerox willfully acquired or maintained monopoly power through changes to the design of its printers and ink sticks.

MSI has also moved to strike most of the evidence submitted by Xerox in connection with this motion on the ground, among others, that an attorney who submitted the evidence as attachments to a declaration does not have personal knowledge of how it was produced. (MSI Objs. and Mot. to Strike, 2-3 (Docket No. 108).) In its reply memorandum, MSI limited its motion to two specific categories of evidence: certain point-of-sale data concerning the volume of Xerox's ink sales to retailers, and marketing materials generated by HP. (MSI Reply 1-2, 8-9.) The Court's disposition of Xerox's motion does not depend on these categories of evidence. Thus, MSI's motion is moot.

MSI also urges the Court to order Xerox to show cause why it should not be sanctioned because of irregularities in the signature page of a declaration submitted by Christopher Iburg. (*Id.* at 9-10.) Having reviewed the challenged declaration, the Court sees no cause for concern. MSI's sophisticated attorneys doubtless know that it is commonplace to attach a scanned signature page to an electronically produced document. And the discrepancies between the signature page and the rest of the declaration—a missing page number and a pagination error—hardly support a reasonable inference that Mr. Iburg did not read or sign the declaration.

# III. CONCLUSION

MSI has failed to set out specific facts showing a genuine issue for trial as to Xerox's monopoly power. Accordingly, Xerox's motion for summary judgment on MSI's monopolization counterclaims [101] is granted. The Court did not consider evidence related to Xerox's loyalty rebate programs in its disposition of this motion, thus this decision and order should not be interpreted as superseding or modifying the Court's March 30, 2009, decision and order in *Xerox II*.

SO ORDERED.

Dated: New York, New York September 30, 2009

Richard J. Holwell United States District Judge