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7	UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA (OAKLAND DIVISION)		
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9		,	
10	ALFRED T. GIULIANO, Chapter 7)	
11	Trustee of the Ritz Estate; CPM ELECTRONICS INC.; E.S.E.		
12	ELECTRONICS, INC.;	Civ. No. 4:10-cv-2787 (SBA)	
13	and MFLASH, INC., on Behalf of Themselves and All)	
14	Others Similarly Situated,		
15	Plaintiffs,) FOURTH AMENDED) COMPLAINT	
16	SANDISK CORPORATION,)	
17	Defendant.) CLASS ACTION) ANTITRUST	
18) JURY TRIAL DEMANDED	
19)	
20	On behalf of themselves and other similarly situated direct purchasers in the United States		
21	of flash chips and final flash products (defined herein) from the SanDisk Corporation ("SanDisk")		
22	and from its controlled manufacturing joint venture with the Toshiba Corporation, Alfred T.		
23			
24	Giuliano, Chapter 7 Trustee of the Ritz Bankruptcy Estate ("Ritz Estate"), CPM Electronics Inc.,		
25	E.S.E. Electronics, Inc., and MFLASH, Inc. (collectively, "Plaintiffs"), allege as follows:		
26			
27	Fourth Amended Complaint	Civ. No. 4:10-cv-2787 (SBA)	

SUMMARY OF CLAIMS

- 1. NAND flash memory is a form of non-volatile erasable memory. Its transistors are connected in series and this memory is especially attractive for the storage of large amounts of data.
- 2. NAND flash memory comes in two forms. The first form, referred to herein as "flash chips," is basic flash memory that can come in wafer, die form, or packaged die form. Wafers are the uncut, circular slices of fabricated semiconductor material that can be cut into die form. In die form, the flash chip may be in the form of a raw die or a "bumped die." Die can be placed into a package that has pins (or connectors) that allow the flash chip to be attached to a circuit board. Bumped die can be directly attached to a printed circuit board without the need of pinned package. Flash chips (including die, and bumped die, and packaged die) can be incorporated into various electronic products, including cards, drives, and sticks used in mobile phones, digital cameras, digital video camcorders, gaming devices, portable digital audio/video players, personal computers, and global positioning systems ("GPS"). The second form of NAND flash memory, referred to herein as "final flash products," is a subset of these electronic products. It includes solid state drives (SSD), memory cards, wireless memory, USB storage, embedded storage, and music and video players.
- 3. SanDisk has maintained monopolies in the relevant markets for flash chips and final flash products, or has attempted to monopolize these markets, by at least four practices.
- 4. *First*, it has obtained fraudulent patents ("fraudulent patents") by committing willful and knowing fraud on the United States Patent and Trademark Office ("USPTO"). It has used these fraudulent patents to disadvantage and to exclude competition in the relevant markets by asserting their infringement.

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- 5. One of these patents, identified below as the '338 patent, has been asserted by SanDisk to be a key to the manufacture of flash chips and final flash products in the relevant markets. SanDisk refers to it as its "crown jewel" patent, and its assertion of multiple infringements of this fraudulent patent has greatly injured competition, competitors, and purchasers (who have paid monopoly prices for SanDisk NAND flash memory).
- 6. SanDisk attempted to remove limitations on this patent grant by seeking the related '517 patent, as identified below. It used this additional fraudulent patent as well to allege infringement actions against competitors, thereby further injuring competition, competitors, and purchasers (who have paid monopoly prices for SanDisk flash memory).
- 7. Second, SanDisk has maintained a monopoly together with Eliyahou Harari, a former officer of competitor Wafer Scale Integration, Inc. ("WSI") by converting tortiously the knowledge and ownership of flash memory technology from WSI (and its successor STMicroelectronics, Inc. ("STM")). At the same time (or shortly after) he appropriated WSI's technology, Harari co-founded SanDisk (originally known as SunDisk), where he served as Chairman and Chief Executive Officer through 2010. This technology appropriated from WSI made possible the issuance of patents '338 and '517 and the infringement campaign that allowed SanDisk to target its competitors with wrongful infringement suits, and which drove STM, the sixth largest producer of flash memory, from the relevant markets in March of 2008.
- 8. Third, to enhance this suppression of competition using fraudulent patents, SanDisk has also threatened purchasers of NAND flash memory—either directly or through its conduct—that they will be left holding large quantities of unusable flash memory if they purchase that memory from SanDisk's competitors. These purchasers also have faced the threat that they will be made to

acquire flash memory products at disadvantageous prices and terms if they are later forced to turn to SanDisk for such products.

- 9. Further, shortly after this lawsuit was filed, SanDisk retaliated against Ritz Camera & Image LLC ("RCI"), and the proposed Class it seeks to represent, by terminating its supply of NAND flash memory to RCI. By so doing, SanDisk has sought to exercise and maintain its monopoly to prevent this Court from learning about, and vindicating, legitimate claims against SanDisk's unlawful conduct of overcharging its NAND flash memory purchasers.
- 10. Fourth, upon information and belief, SanDisk has maintained and entrenched its monopoly by entering into a secret global settlement agreement with STM, formerly the sixth largest provider of NAND flash memory. This settlement ratified STM's exit from the relevant markets (well after it had alleged monopolization of the relevant markets in this Court). This settlement apparently failed to provide a means for STM to re-enter the market. It also removed the threat of a STM/Hynix joint venture capable of mounting a major competitive challenge to SanDisk. SanDisk subsequently and recently co-opted the Hynix threat by itself forming a joint venture with Hynix.
- 11. SanDisk manufactures the vast majority of its NAND flash memory imported into the United States by using a SanDisk controlled and licensed joint venture with Toshiba, which fabricates this NAND flash memory at Toshiba's Yokkaichi factory in Japan. SanDisk terms this memory as "captive supply."
- 12. At least 75% of all flash chips and final flash products imported into or sold in the United States are either (a) manufactured and sold by SanDisk or its controlled and licensed joint venture with Toshiba; or (b) manufactured by other controlled licensees of SanDisk patents.

harmed, and United States purchasers of flash chips and final flash products from SanDisk and its

controlled and licensed Toshiba joint venture have paid above-competitive, monopoly prices for

JURISDICTION AND VENUE

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these products since June 25, 2006.

By virtue of SanDisk's monopolization, competition and competitors have been

- 14. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1337 (commerce and antitrust regulation) and 1331 (federal question), as this action arises under Section 2 of the Sherman Act (15 U.S.C. § 2), and Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15(a) and 26).
- 15. Venue is proper because SanDisk resides within this judicial district as provided in 28 U.S.C. § 1391(b) and (c), and as provided in Sections 4 and 12 of the Clayton Act (15 U.S.C. §§ 15 and 22).

PARTIES

- 16. At the time this suit commenced, RCI was a Delaware limited liability company headquartered in Beltsville, Maryland. It was the successor in interest of Ritz Camera Centers, Inc. ("RCC"). RCI and RCC are collectively referred to as "Ritz Camera." Over the four years leading up to the filing of this suit, Ritz Camera directly bought tens of millions of dollars of flash memory products from SanDisk. Since the commencement of this action, RCI has sought bankruptcy protection, and RCI's legal claims passed to the Ritz Estate.
- 17. Alfred T. Giuliano is Chapter 7 Trustee to the Ritz Estate. His office is located in West Berlin, New Jersey. The Court approved the substitution of Mr. Giuliano as Plaintiff in this action on July 5, 2013. *See* Dkt. # 138.

- 18. CPM Electronics Inc. ("CPM") is a California corporation headquartered in Chula Vista, California. During the period of 2006 to the present, CPM directly bought millions of dollars of NAND flash memory from SanDisk.
- 19. E.S.E. Electronics, Inc. ("ESE") is a California corporation headquartered in Los Angeles, California. During the period of 2006 to the present, ESE directly bought NAND flash memory from SanDisk.
- 20. MFLASH, Inc. ("MFLASH") is a California corporation. During the period of 2006 to the present, MFLASH directly purchased flash chips and/or was assigned this legal claim by a direct purchaser of flash chips from SanDisk.
- 21. SanDisk Corporation is a Delaware corporation headquartered in Milpitas, California.

 SanDisk and its licensees are the world's largest suppliers of flash memory products.

CLASS ACTION ALLEGATIONS

Class of Direct Purchasers of SanDisk Final Flash Products

22. Alfred T. Giuliano, as Trustee to the Ritz Estate, CPM, and ESE (collectively referred to as "Final Flash Product Class Representatives") are representative of a class of persons residing in the United States who, on or after June 25, 2006, directly purchased from SanDisk, or from its controlled and licensed joint venture with Toshiba Corporation, final flash products using technology claimed to be patented by SanDisk ("Final Flash Product Class"). Such products include, without limitation, those SanDisk sold to retail firms, original equipment manufacturers ("OEMs"), and distributors. Purchases of final flash products that contain a microcontroller, a semiconductor that interfaces with electronic equipment and operates the flash memory, are included in the Final Flash

Product Class. Purchases of flash memory combined with dynamic random access memory ("DRAM"), flash memory combined with static random access memory ("SRAM"), or flash memory combined with a microprocessor ("system on a chip") are excluded from the Class.

Class of Direct Purchasers of SanDisk Flash Chips

23. MFLASH (or "Flash Chip Class Representative") is representative of a class of persons residing in the United States who, on or after June 25, 2006, directly purchased from SanDisk, or from its controlled and licensed joint venture with Toshiba Corporation, flash chips using technology claimed to be patented by SanDisk ("Flash Chip Class"). Such products include, without limitation, those SanDisk sold to retail firms, OEMs, and distributors.

Rule 23(a) Prerequisites

- 24. Prosecution of the claims of the Classes as a class action is appropriate because the prerequisites of Rule 23(a) of the Federal Rules of Civil Procedure are met:
- (a) The number of persons in the Classes is in the thousands, and the members of the Classes are therefore so numerous that joinder of all members of the Classes is impracticable. Joinder is also impracticable because of the geographic diversity of the members of the Classes, the need to expedite judicial relief, and the Final Flash Product Class Representatives' and Flash Chip Class Representatives' (together, "Class Representatives") lack of knowledge of the identity and addresses of all members of the Classes.
- (b) There are numerous questions of law and fact arising from the pattern of SanDisk's anticompetitive conduct which are common to the members of the Classes. These include, but are not limited to, common issues as to (1) whether SanDisk has fraudulently obtained

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and converted two flash memory patents, and used them to exclude competition; converted WSI/STM technology and by so doing harmed competition; threatened competitors' customers; and entered into a secret anticompetitive settlement agreement with STM; (2) whether SanDisk has monopolized the relevant markets and has monopoly power in the relevant markets; and (3) whether this monopolization has caused members of the Classes to pay unlawful, above-competitive prices to SanDisk, or to its controlled and licensed Toshiba joint venture, for SanDisk flash chips and final flash products. In addition, there are common issues as to the amount of monetary relief available to the members of the Classes.

- 25. The claims of the Class Representatives are typical of the claims of the members of the Classes and fairly encompass the claims of the members of the Classes. The Class Representatives and the members of the Classes are similarly or identically harmed by the same systematic and pervasive anticompetitive conduct in part because they have paid monopoly, above-competitive prices for flash chips and final flash products purchased from SanDisk and its controlled and licensed Toshiba joint venture.
- 26. The Class Representatives and their counsel will fairly and adequately protect the interests of the members of the Classes. There are no material conflicts between the claims of the Class Representatives and the members of the Classes making class certification inappropriate. Counsel for the Classes will vigorously assert the Class Representatives' claims and those of the members of the Classes.

Rule 23(b)(2) Prerequisites

27. In addition, the prosecution of the claims of the Classes as a class action pursuant to Rule 23(b)(2) is appropriate because SanDisk has acted, or refused to act, on grounds generally

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declaratory relief, for the Classes as a whole.

Rule 23(b)(3) Prerequisites

applicable to the Classes, thereby making appropriate final injunctive relief, or corresponding

- 28. In addition, the prosecution of the claims of the Classes as a class action pursuant to Rule 23(b)(3) is appropriate because:
- (a) The questions of law or fact common to the members of the Classes predominate over any questions affecting only its individual members; and
- (b) A class action is superior to other methods for the fair and efficient resolution of the controversy.

RELEVANT MARKETS FOR FLASH CHIPS AND FOR FINAL FLASH PRODUCTS

29. The "relevant product markets" at issue in this case are (1) the market for flash chips, the manufacture, sale, or importation of which is subject to the reach of the U.S. patent laws, and (2) the market for final flash products, the manufacture, sale, or importation of which is subject to the reach of the U.S. patent laws. The market for final flash products includes the following submarkets based on product categories: solid state drives (SSD), memory cards, wireless memory, USB storage, embedded storage, and music and video players. Purchasers of flash chips and final flash products may buy such products only from SanDisk or its licensees, or must buy products that do not practice any SanDisk patent. Purchasers of flash chips and final flash products do not regard other types of memory as substitutes for NAND flash. Thus, purchasers of flash chips and final flash products, the manufacture, sale, or importation of which is subject to the reach of the U.S. patent laws during the class period, could not switch to other types of memory in response to a small but significant

increase in the price of NAND flash memory in the relevant product markets, as defined in this

paragraph.

30. At least 75% of all flash chips and final flash products imported and sold in the United States are either (a) manufactured and sold by SanDisk or its controlled and licensed Toshiba joint venture; or (b) manufactured by other licensees of patents for NAND flash memory technology

claimed to be owned by SanDisk.

- 31. With its controlled and licensed Toshiba joint venture and its other controlled licensees of NAND patented technology, SanDisk has the power to control prices in, and restrict entry into, the relevant product markets. It has maintained a monopoly in the relevant product markets for flash chips and final flash products.
- 32. The "relevant geographic market" for the purchase of flash chips and final flash products is worldwide, because flash chips and final flash products can be manufactured and distributed on a global scale. The "relevant markets," as used herein, refer to (1) the worldwide market for flash chips, the manufacture, sale, or importation of which is subject to the reach of the U.S. patent laws, and (2) the worldwide market for final flash products, the manufacture, sale, or importation of which is subject to the reach of the U.S. patent laws.
- 33. The relevant markets are characterized by high barriers to entry and expansion as a result of, among other things, SanDisk's claimed ownership of U.S. patents covering the technology necessary to manufacture NAND flash memory; its unlawful assertion of fraudulently obtained or converted technology to control entry and expansion within the relevant markets; and the extremely high costs necessary to enter the relevant markets. The construction of a flash memory fabrication facility can cost billions of dollars, and the plant may need to be retooled every five years.

EXCLUSIONARY CONDUCT

- 34. NAND flash memory is memory that can be erased electronically. Flash memory allows data to be stored in a durable, compact format that retains the data after the power has been turned off.
- 35. SanDisk competes in the relevant markets by selling flash chips and final flash products to firms in the proposed Classes.
- 36. Through a continuing pattern of exclusionary conduct, SanDisk has created and maintained, or at least attempted to obtain, a monopoly in each of the relevant markets and with its controlled and licensed Toshiba joint venture has sold SanDisk flash chips and final flash products at above-competitive, monopoly prices to members of the proposed Classes.
- 37. SanDisk has done so by (a) fraudulently obtaining two patents from the USPTO and using them to restrain competition by suing for infringement STM, Samsung Corporation ("Samsung"), and possibly other competitors; (b) converting STM technology and knowledge to file and obtain the fraudulent patents (which in turn were used to exclude STM from the relevant markets by multiple infringement actions); (c) threatening the customers of competitors purchasing NAND flash memory, as well as terminating supply to RCI to prevent vindication of purchaser overcharge claims; and (d) entering into a global settlement with STM tending to entrench and expand its monopoly over the relevant markets.
- 38. SanDisk's exclusionary conduct has harmed competition in the relevant markets by, among other things, increasing the prices for flash chips and final flash products purchased by members of the proposed Classes to above-competitive, monopoly levels.

FRAUDULENT ACQUISITION OF PATENTS FROM THE UNITED STATES PATENT AND TRADEMARK OFFICE (Walker Process Claim)

- 39. Over the past decade, SanDisk has fraudulently obtained two patents which it has termed its "crown jewel" patents from the USPTO: U.S. Patent Number 5,172,338 (the "338 patent") and U.S. Patent Number 5,991,517 (the "517 patent"). In so doing, SanDisk, the named inventors of the patents, and prosecution counsel (collectively "SanDisk") deliberately failed to disclose material information including key prior art at times when that key prior art was known to SanDisk, and SanDisk had a duty to disclose that prior art to the USPTO.
- 40. Furthermore, SanDisk made representations to the USPTO that were material to the patentability of its then pending patent claims and which it knew to be false. The material false representations and omissions were intended to induce and did induce reliance by the patent examiners charged with determining whether to grant SanDisk's patent claims.
- 41. Indeed, as reflected in the patent examiner's "reason for allowance," the USPTO unquestionably relied on SanDisk's material false statements and omissions as a principal reason for allowing SanDisk's patent claims to issue. But for SanDisk's material false statements and omissions, the claims of the '338 patent and '517 patent could not have issued as written.
- 42. SanDisk's fraudulent assertion of the '338 and '517 patents have had particularly pernicious effects on competition in the relevant markets because SanDisk claims they are the key "crown jewel" patents for the manufacture of NAND flash memory, and its multiple assertions of infringement have had wide detrimental effects on competition, competitors, and purchasers in the proposed Classes.

SanDisk's Original Prosecution of the '338 Patent

- 43. The '338 patent was issued on December 15, 1992. According to its abstract, the patent describes "[i]mprovements in the circuits and techniques for read, write and erase of EEprom memory [that] enable non-volatile multi-state memory to operate with enhanced performance over an extended period of time."
- 44. The words "permanent inhibit" appear nowhere in any portion of the specification or the prosecution history of the '338 patent before December 15, 1992.

Reexamination of the '338 Patent

- 45. On January 11, 1996, SanDisk filed a complaint with the United States International Trade Commission ("ITC") asserting that Samsung infringed claim 27 of the '338 patent as well as claims of another patent.
- 46. In its defense, Samsung claimed (as did STM in a related matter before this Court) that prior art disclosed an electrically erasable programmable read only memory ("EEPROM") function where incremental charges are added to the EEPROM until an individual cell reads in the correct state, and once the correct charge is attained, the application of any additional charge is inhibited so long as the cell is in its correct state. This is known as an "incremental" or "temporary" inhibit.
- 47. As a result of this prior art, SanDisk and Samsung filed requests for reexamination of the '338 patent on September 15 and 17, 1996, respectively. They based the request on the 1983 article, *An Improved Method for Programming a Word-Erasable EEPROM*, authored by Dr. Guido Torelli in an Italian publication, Alta Frequenza-Scientific Review in Electronics, ("Torelli article") and the product brochures and technical notes for certain SGS Thompson (STM's predecessor in

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interest) products, the M206, M293, and M490/491 integrated circuits. Samsung argued that the claim limitation described incremental inhibition.

- 48. SanDisk argued claim 27 was patentable because the inhibit function was "permanent" and not incremental or temporary, that this structure was latch 721 shown in Figure 16, and that a person of ordinary skill in the art would know that latch 721 operates as a "one-way latch" required for a permanent inhibit.
- 49. The USPTO relied on these and other SanDisk representations in deciding to confirm the patentability of these claims. For example, in his reasons for confirming the patentability of claim 27, the patent examiner stated that "the inhibiting feature recited in [the] claims of the '338 patent is enabled by latch 721 in Figure 16 which is a one-way resettable latch." ('338 Re-Exam, Reexamination Reasons for Patentability/Confirmation, Apr. 16, 1997, at 3.)
- 50. The SanDisk representations in this regard were false. Latch 721 is a standard, two-way data latch and the inventors of the '338 patent had published an article not disclosed to the examiner that described an identically drawn latch as just that a standard two-way data latch.

Prosecution of the '517 Patent

- 51. The prosecution leading to the '517 patent overlapped the USPTO's reexamination of the '338 patent. At least in part, the '517 patent was intended to claim a permanent inhibit function without several of the claim limitations that exist in the '338 patent.
- 52. SanDisk sought claims based on the '338 patent in the '517 patent family in December 1996. SanDisk stated that the "claims being substituted into this application are directed to inhibiting, cell-by-cell, further application of voltages to a plurality of cells when the individual cells are verified to have reached their desired states." ('517 File History, Preliminary Amendment,

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Dec. 20, 1996, at 29). This was the first mention of "cell by cell" inhibition anywhere in the chain of prosecutions leading to the '517 patent, and was done after the discovery of the Torelli article.

SanDisk's Multiple Failures to Disclose Prior Art and Misrepresentations

- 53. At all times relevant to the reexamination of the '338 patent and the prosecution of the '517 patent, SanDisk and its agents had a duty to disclose to the USPTO all information known to SanDisk that was material to the question of patentability. SanDisk also owed a duty of good faith and candor, which encompassed a duty to disclose prior art. For each of these two patents, SanDisk owed these duties from the time it made its application to the time the USPTO issued the patent. For the '338 reexamination, SanDisk also owed these duties from the time it made its request for reexamination to the time the USPTO issued its certificate of confirmation.
- 54. As described below, persons substantially involved with the prosecution of the SanDisk patents repeatedly failed to disclose material prior art. Had SanDisk disclosed this prior art, the claims of the '338 patent would not have survived reexamination, and the claims of the '517 patent would not have been issued as written.
- 55. A single law firm ("the SanDisk law firm") prosecuted both the '338 patent application and reexamination, as well as the '517 patent application on behalf of SanDisk. Since at least February 1996, that law firm maintained a database of prior art references to assist in the preparation of San Disk's patent applications. That database contained the following prior art.

The Simko Patents

56. On December 26, 1989, and January 29, 1991, the USPTO issued U.S. Patent Number 4,890,259 (the "'259 patent") and U.S. Patent Number 4,989,179 (the "'179 patent"), respectively,

to Dr. Richard Simko (collectively, the "Simko patents"). Both Simko patents disclose a "permanent

inhibit" programming system. SanDisk knew about the Simko patents no later than January 5, 1993, when the SanDisk law firm disclosed those patents in a separate SanDisk patent prosecution that ultimately resulted in the issuance of U.S. Patent No. 5,293,560. The SanDisk law firm also disclosed the Simko patents on July 8, 1993, in a prosecution that resulted in the issuance of U.S. Patent No. 5,422,842. Accordingly, SanDisk knew about the Simko patents years before the conclusion of SanDisk's '338 reexamination and '517 prosecution.

- 57. In arguing to the USPTO that the claims of the '338 and '517 patents were directed to "permanent inhibit," SanDisk was obligated to inform the USPTO of the existence of the prior art Simko patents. However, SanDisk never disclosed the Simko patents to the USPTO during either the reexamination of the '338 patent or the prosecution of the '517 patent, despite the fact that Dr. Simko was a litigation consultant to SanDisk.
- 58. SanDisk's failure to disclose the Simko patents was intended to deceive the patent examiner into believing that SanDisk's claimed "inhibit" invention was novel. A reasonable patent examiner would have been influenced by SanDisk's failure to disclose the Simko patents, and the patent examiner was influenced, as is reflected in the examiner's reasons for allowance. Had SanDisk disclosed the Simko patents, the claims of the '338 patent would not have survived reexamination and the claims of the '517 patent would not have issued as written.

The JP-100 Patent

59. On February 13, 1986, Toshiro Koyama and Tsugio Tawara published the Japanese Laid Open Patent Application JP S62-188100 (the "JP-100 patent"). Like the Simko patents, the JP-100 patent discloses a "permanent inhibit" programming system. Persons substantially involved

in the prosecution of the '517 patent and the reexamination of the '338 patent knew of the JP-100 patent no later than December 30, 1998. Accordingly, SanDisk knew about the JP-100 patent well before the conclusion of SanDisk's '517 prosecution in November 1999.

- 60. The JP-100 patent was material to the patentability of the then pending '517 patent claims. This fact is confirmed by the decisions of two different patent examiners to whom the JP-100 patent was revealed. SanDisk prosecuted a foreign counterpart to the '517 patent in Japan, with a claim drafted in nearly identical language to claim 1 of the '517 patent. On October 23, 2001, the Japanese Appeal Board rejected this claim as obvious over the JP-100 patent prior art.
- 61. Similarly, in the prosecution of U.S. Patent Application No. 09/129,675, SanDisk initiated interference proceedings before the USPTO in which it asserted a claim drafted to cover nearly identical subject matter as claim 1 of the '517 patent (the "Ohuchi Interference"). On July 12, 2006, the USPTO rejected SanDisk's interference claims as obvious over the JP-100 patent prior art. Thus, whenever a patent examiner considering the patentability of claims like claim 1 of the '517 has become aware of the JP-100 patent, the claim under consideration was rejected.
- 62. Because, *inter alia*, SanDisk was arguing to the USPTO that the claims of the '517 patent were directed to "permanent inhibit," SanDisk was obligated to inform the USPTO of the existence of the prior art JP-100 patent. However, SanDisk never disclosed the JP-100 patent to the USPTO at any time during the '517 prosecution. SanDisk's failure to disclose the JP-100 patent was intended to deceive the patent examiner into believing that SanDisk's claimed "inhibit" invention was novel.
- 63. SanDisk succeeded in this deception effort. A reasonable patent examiner would have relied on SanDisk's failure to disclose the JP-100 patent, and the patent examiner did rely as

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The Sparks Patent

claims of the '517 patent would not have issued as written.

reflected by the examiner's allowance of claim 1. Had SanDisk disclosed the JP-100 patent, the

- 64. On June 28, 1979, the USPTO issued U.S. Patent Number 4,752,871 (the "Sparks patent") to Robert Sparks, et al. The Sparks patent discloses bulk erasing and loading of multiple arrays simultaneously. SanDisk knew about the Sparks patent no later than May 24, 1993, well before the conclusion of the '338 reexamination and the '517 prosecution.
- 65. On May 24, 1993, the SanDisk law firm filed an amendment responding to the USPTO's rejection of another SanDisk patent application, the 763,851 application (the "851 application"), based on the prior art of the Sparks patent. The SanDisk law firm continued to dispute the relationship between the '851 application and the Sparks patent, including in an April 5, 1996 filing with the USPTO.
- 66. Claim 64 of the '338 patent (which SanDisk added during reexamination) and claim 11 of the '517 patent both claim bulk erasing and loading of multiple arrays simultaneously. Accordingly, SanDisk was obligated to inform the USPTO about the prior art of the Sparks patent for the '338 reexamination and the '517 prosecution. SanDisk's failure to disclose the Sparks patent was intended to deceive the patent examiner. A reasonable patent examiner would have relied, and the patent examiner did rely, on SanDisk's failure to disclose the Sparks patent. The '338 patent and certificate of confirmation and the '517 patent would not have been issued had SanDisk disclosed the prior art.

The GB 145 Patent

- 67. On June 28, 1979, Hartmut Schrenk filed United Kingdom Patent application GB 2 029 145 A (the "GB 145 patent"). The GB 145 patent disclosed inhibiting the individual erasing of any addressed cell verified to have reached its intended erase state while enabling further erasing in parallel to other addressed cells not verified. The GB 145 patent was published on June 16, 1982. Thus, persons at SanDisk substantively involved for SanDisk in the prosecution of the '338 reexamination, and the application that led to the '517 patent, knew of the GB 145 patent no later than February 23, 1996. The SanDisk law firm filed an Information Disclosure Statement citing the GB 145 patent on December 30, 1998 in SanDisk's Patent Application No. 09/129,675. Accordingly, SanDisk knew about the GB 145 patent well before the conclusion of the '338 reexamination and the '517 prosecution.
- 68. At least claim 40 of the '338 patent and claims 1, 2, 4, 6, and 10 of the '517 patent claim the same innovations that the GB 145 patent disclosed. SanDisk was therefore obligated to disclose the GB 145 patent in the '338 reexamination and '517 prosecution, and, insofar as SanDisk knew about the GB 145 patent at the time, in the '338 prosecution as well. The GB 145 patent is unquestionably material to SanDisk's patent claims, because the Administrative Law Judge of the ITC has held that the GB 145 patent anticipates '517 patent claims 1, 6, and 10, rendering the patent invalid. (*See* 560 ID at 115-17).
- 69. SanDisk's failure to disclose the GB 145 patent was intended to deceive the USPTO. A reasonable patent examiner would have relied, and the patent examiner did rely, on San Disk's failure to disclose the GB 145 patent, in the '338 patent and certificate of confirmation. The '517 patent would not have been issued had SanDisk disclosed the prior art.

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The Inventor's VLSI Symposium Paper

- 70. As described above, throughout the '338 reexamination, SanDisk repeatedly and knowingly misrepresented Figure 16 of the '338 patent as disclosing a "one-way latch" when, in fact, it discloses only a standard two-way data latch.
- 71. In 1992, a named inventor of the '338 and '517 patents, presented a paper co-authored by another named inventor of the '338 and '517 patents to the VLSI (Very Large Scale Integration) Symposium in Seattle, Washington ("VLSI Symposium paper"). The latch circuitry and its input interface shown in Figure 5 of the VLSI Symposium paper is identical to Figure 16 of the '338 patent, but describes the latch (including its reset) as a standard data latch, not a "one-way latch."
- 72. Despite its obligation to do so, SanDisk never disclosed as prior art the VLSI Symposium paper during the reexamination of the '338 patent. Instead, SanDisk repeatedly and falsely represented to the examiner and others that Figure 16 was a "one-way latch." SanDisk knew those representations were false when it made them, and made the representations and failed to disclose the prior art of the VLSI Symposium paper with an intent to deceive. A reasonable patent examiner would have relied, and the patent examiner did rely, on SanDisk's misrepresentations and failure to disclose the VLSI Symposium paper in granting a certificate of confirmation for the '338 patent. The certificate of confirmation would not have been issued had SanDisk not made misrepresentations and disclosed the prior art.
- 73. In 2006, SanDisk filed the application that led to the '517 patent for the specific purpose of broadening SanDisk's rights and jettisoning the means-plus-function limitations of the '338 patent:

programming feature without all the other limitations included in claim 27 of the '338 patent that are not necessary to its patentability. The feature of inhibiting programming on a cell-by-cell basis until all cells in a group are programmed (also referenced as "termination") *is patentable by itself*.

('517 File History, Second Preliminary Amendment, Dec. 23, 1997, at 9-10) (emphasis added).

The principal purpose of the present application is to define the cell-by-cell inhibition

- SanDisk could not have made this statement if the Simko patents had been disclosed to the USPTO.
- 74. SanDisk also never cited two additional "permanent inhibit" references the GB 145 patent and the JP-100 patent about which it was aware. Disclosure of those references would have prevented SanDisk from representing that permanent inhibit is patentable by itself.
- 75. SanDisk and its prosecuting attorney unquestionably knew of the JP-100 and the GB 145 patent at the time they were prosecuting the '517 application. In a filing in the Ohuchi Interference on December 3, 1998, for example, SanDisk's prosecuting attorney told the USPTO that he had reviewed the Ohuchi patent file history. That file history is replete with substantive discussions of the JP-100 patent and the GB 145 patent prior art and the fact that they disclose permanent inhibit. Thus, by arguing to the USPTO in the '517 prosecution that permanent inhibit was patentable by itself, SanDisk intentionally misled the USPTO as to the patentability of the '517 patent's claims.
- 76. Further, the fraud on the USPTO was compounded and deepened by Harari's failure to disclose that he had stolen WSI/STM knowledge to prosecute these patents. *See infra* ¶¶ 78-114.
- 77. If SanDisk had not fraudulently obtained the patents described above and wrongfully enforced those patents against competitors, the technology embodied in those patents would be freely available to competing providers of flash memory products, with the result that there would be more competition and lower prices in the relevant markets.

CONCERTED CONDUCT TO CONVERT WSI/STM TECHNOLOGY THAT WAS THEN USED TO EXCLUDE COMPETITION

- 78. In support of its monopolization, SanDisk acted with its CEO Eliyahou Harari to disadvantage SanDisk's significant competitor, STM, by converting and misappropriating STM's NAND flash memory technology, technology which was wholly incorporated by SanDisk into the filings leading to the issuance of the fraudulent "crown jewel" '338 and '517 patents. The stolen technology and knowledge were central to the scope of the grants of both patents. By stealing this technology, SanDisk competitively disadvantaged STM, eventually using SanDisk's own technology to exclude STM from the market entirely in March of 2008.
- 79. Harari is a former director and officer of WSI, which was purchased by STM. He is a founder of SanDisk and until recently Chairman and Chief Executive Officer.
- 80. Harari had served as an employee, officer, consultant, and/or director of WSI. WSI was co-founded in 1983 by Harari. It designed and sold programmable system devices, including memory systems and nonvolatile memories. While Harari was an officer and/or director of WSI, it was designing and developing flash memory products.
- 81. On July 27, 2000, STM and WSI merged, with STM remaining as the surviving corporation. Pursuant to the Agreement and Plan of Merger between STM and WSI, STM succeeded to "all rights and property" of WSI.
- 82. Harari served numerous roles at WSI between its founding on August 1, 1983, and his resignation in March of 1989, including:
 - Chief Executive Officer (CEO): August 1, 1983 until June 11, 1986;
 - Chief Technology Officer (CTO): June 11, 1986 until February 28, 1988;

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• Director: August 1, 1983 until March 15, 1989; and

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Chairman of the Board: November 30, 1983 until June 15, 1985, and again from June 11, 1986 until February 28, 1988.

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Harari's Patent Assignment Obligation

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83. Early in the period that Harari was an employee, officer, and director of WSI, he

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signed two agreements with the company: (1) an Employee Agreement Regarding Confidentiality

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and Inventions dated February 22, 1984 (the "Inventions Agreement"), and (2) a Key Employee

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Agreement dated February 27, 1984 (the "Key Employee Agreement").

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84. Through the Inventions Agreement, Harari agreed to the following:

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2. I will maintain in confidence and will not disclose or use, either during or after the term of my employment without the prior written consent of [WSI], any proprietary or confidential information or know-how belonging to [WSI] Upon termination of my employment or at the request of my supervisor before termination, I will deliver to [WSI] all written and tangible material in my possession incorporating

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the Proprietary Information or otherwise relating to [WSI's] business. . . .

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3. I will promptly disclose and describe to [WSI] (I) all inventions, improvements, discoveries and technical developments ("Inventions"), whether or not patentable, made or conceived by me, either alone or with others, during the term of

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my employment, provided that [WSI] shall receive such information in confidence. I hereby assign and agree to assign to [WSI] my entire right, title and interest in and to such Inventions which relate in any way to or are useful in [WSI's] business as

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presently conducted or as conducted at any future time during my employment, and agree to cooperate with WSI and its designee(s) both during and after my employment in the procurement and maintenance, at [WSI's] expense and at its discretion, of

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patents, copyrights, and/or other protection of [WSI's] rights in such inventions. I will keep and maintain adequate and current written records of all such Inventions, which shall be and remain the property of the [WSI].

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(c) During my employment by [WSI] I will not engage in any employment, consulting or other activity in any business without [WSI's] express written agreement.

(Inventions Agreement at 1) (emphasis added).

WSI's Development of NAND Flash Memory

- 85. WSI, a company which designed and produced various kinds of semiconductor memory (memory on a chip) for computers and electronic devices, dedicated substantial resources and effort to research and development of new memory technologies.
- 86. Semiconductor memory can be either volatile or nonvolatile. Volatile memory requires a power source to maintain data in memory, while nonvolatile memory requires no power to retain data.
- 87. The main memory in computers has traditionally been DRAM or SRAM, both of which are volatile memories. Thus, if the computer is turned off, any data stored in DRAM or SRAM will be lost.
- 88. Computers have also used nonvolatile memories such as read only memory ("ROM") and programmable read only memory ("PROM") and electrically programmable read only memory ("EPROM").
- 89. In the late 1980s, when Harari was still an employee, officer, and director of WSI, a new nonvolatile memory technology called electrically erasable programmable read only memory ("EEPROM" or "E²PROM") was developed, which offered a substantial advantage over ROM, PROM or EPROM because it was electrically erasable, as well as reprogrammable. When an EEPROM is capable of simultaneous quick erasure of blocks of its memory cells, as well as being

reprogrammable, it is referred to as "flash EEPROM," or "flash memory." If the computer is turned

on NAND flash memory. By at least 1987, WSI was involved in research and development efforts

While Harari was its Chief Technical Officer ("CTO"), WSI began development work

off, data in these memories are not lost.

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regarding flash memory technology. By 1989, WSI had a prototype NAND flash memory product, and was anticipating revenues from this line of business. As an employee, CTO, and/or director of WSI, Harari was aware of WSI's research and development efforts with regard to this flash memory.

91. As a director and officer of WSI, Harari was in a position of trust and confidence and

- had fiduciary obligations, including at least the following: (a) to act in good faith and in the best interests of WSI and its shareholders; (b) to put the interests of WSI and its shareholders ahead of his private interests; (c) not to enter into any business in competition with WSI; (d) to bring business opportunities in the line of business of WSI to the attention of WSI and not to appropriate the opportunity for himself; (e) to protect and preserve the assets of WSI; and (f) to disclose material facts to WSI concerning his business dealings in the same field as WSI's business endeavors.
- 92. Together with SanDisk, and in aid of its monopolization and attempted monopolization, Harari violated these obligations by converting one patent and two applications which eventually were used to assist SanDisk in obtaining the '338 and '517 "crown jewel" patents, which SanDisk used to bring infringement actions against STM and other competitors.
- 93. WSI, in order to protect its intellectual property, routinely applied for United States patents to cover inventions developed in the course of its business. As an employee, officer, and director of WSI, Harari had fiduciary and contractual obligations to assist WSI with the protection of its intellectual property, and to assign inventions which related to WSI's business to WSI.

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and director.

94. Harari and WSI entered into an agreement dated February 29, 1988 (the "Consulting and Directorship Agreement"). In this agreement Harari resigned his duties as an employee and officer of WSI effective February 28, 1988.

- 95. In the Consulting and Directorship Agreement, WSI and Harari also agreed that: (a) WSI would continue to nominate Harari as a director until an IPO took place; (b) Harari would be a paid consultant to WSI for 11 months at his then current salary; (c) WSI had the right to extend the Consulting and Directorship Agreement for a period of six months; and (d) Harari would "continue to be bound by and comply with the terms of his Employee Agreement Regarding Confidentiality and Inventions dated February 22, 1984." (Consulting and Directorship Agreement at 4).
- 96. The obligations in the Inventions Agreement as extended by the Consulting and Directorship Agreement included, among other things, three important obligations: (a) to maintain in confidence and not to use or disclose any proprietary or confidential information or know-how of WSI without the company's prior written consent; (b) to assign "all inventions, improvements, discoveries and technical developments ('Inventions'), whether or not patentable"; and (c) "not [to] engage in any employment, consulting or other activity in any business without the Company's express written agreement." (Inventions Agreement at 2; Consulting and Directorship Agreement at 6).
- 97. Furthermore, as a director of WSI, Harari continued in a position of trust and confidence and had all of the same fiduciary obligations he previously had when he was an officer

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Harari Converted STM Technology Which Led Eventually to the Issuance of the Fraudulent "Crown Jewel" Patents Used in Infringement Actions Against Competing Manufacturers of NAND Flash Memory, and To Force STM Out of the Market

- 98. Harari filed two patent applications three weeks after tendering his resignation as a director of WSI, but before the Board of Directors accepted his resignation. The inventions disclosed in these applications were invented and developed while Harari was an officer, director and/or consultant of WSI.
- 99. Specifically, on April 13, 1989, Harari filed two patent applications with the USPTO numbered 07/337,566 and 07/337,579. While these two applications were abandoned, they led to other patent applications that also included the misappropriated technology. One of these patents is the "crown jewel" fraudulent '338 patent, the application for which was filed on April 11, 1990, as a continuation in part of application number 07/337,579. This was just over a year after Harari's resignation from the WSI Board of Directors. Another of these patents is the closely related (and also fraudulent) '517 patent, the application for which was filed on December 20, 1996; the '517 patent claims priority through a chain of applications to application number 07/337,566.
- 100. SanDisk and Harari later used the '338 and '517 patents to file multiple infringement actions against STM, to impose \$20,000,000 of attorney's fees upon it, and to precipitate its exit from the relevant markets in March of 2008.
- 101. On May 17, 1989, the Board of Directors of WSI met and accepted Harari's resignation effective after the Board meeting of March 15, 1989. The Board agreed to Harari's request to back-date his resignation without knowing that Harari had filed the above patent

applications on April 13, 1989, and stolen central and key WSI flash memory knowledge and technology to do so.

- 102. On information and belief, Harari did not disclose applications 07/337,566 or 07/337,579 to WSI at any time. WSI had no way of knowing of Harari's improper conduct, as patent applications filed with the USPTO are confidential.
- 103. If WSI had known that Harari had misappropriated its technology, and eventually used it to file on April 13, 1989, two confidential patent applications that led to the issuance of the fraudulent '338 and '517 patents, it could have hastened its own competing patent application (if not aware of prior art invalidating this application); asked that the resulting '338 and '517 patents be conveyed to it under conversion and contract law; and/or immediately contested the validity of the '338 patent after its issuance on December 15, 1992. None of these options would have precluded STM and SanDisk from continuing to compete in the market. Thus, STM would have had the opportunity to prevent the use of these NAND flash memory patents claimed by SanDisk to be central to the fabrication of flash memory in infringement actions well over a decade before SanDisk began its infringement campaign against STM, using STM's own technology.
- 104. On information and belief, the ideas disclosed in these converted patent applications were known to or conceived by Harari while he was a director and/or consultant of WSI, and the evidence at trial may prove that he had known of or conceived of these ideas during his tenure as an employee and officer as well. Moreover, on information and belief, STM has contended that Harari actively worked on the preparation of all these patent applications during his tenure as a director and/or consultant to WSI, and that Harari concealed this activity from WSI.

105. These two patent applications (and resulting '338 and '517 patents) contain ideas and designs that would have benefitted from the design and development work being done at WSI on NAND flash memory.

106. Further, Harari filed on March 15, 1989 Patent Application No. 07/323,779, which became patent 5,070,032 (the "'032 patent"), with the USPTO. It was entitled "method of making dense flash EEPROM semiconductor memory structures." This teaches a good, but not the only, way to manufacture EEPROM, which incorporates erase structures for application in all sorts of memory including NAND flash memory. To do so, Harari further converted STM erase-gate technology that was specified as necessary for the implementation of the fraudulent patents used to exclude STM from the market, and STM was excluded from using technology stolen from it.

107. Further, as noted above, on March 21, 1989, Harari tendered his resignation from the Board of Directors of WSI, requesting that his resignation be back-dated to March 15, 1989 – the same day he had filed the '032 patent application. Harari made this request without disclosing to the Board that he had filed the '032 patent application. This is clear evidence of his intent to conceal his patent filing conduct from WSI, and to obtain for himself patent rights that he knew should have been assigned to WSI.

Harari Founded SanDisk, a Competitor of WSI, While Serving as a Director of WSI

- 108. On or about June 1, 1988, Harari founded SanDisk, then known as SunDisk, along with Sanjay Mehrotra and Jack Yuan.
- 109. Harari founded SanDisk while serving as a Director of WSI, and therefore was under a fiduciary obligation not to enter into any business in competition with WSI. Moreover, Harari had

a fiduciary obligation to present corporate opportunities in WSI's line of business to WSI, and not to

appropriate such opportunities to himself or another company.

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110. On information and belief, WSI/STM, since at least 1987 and until 2008, has focused its research and development efforts in part on developing NAND flash memory technology, and was continuing to develop such technology at the time SanDisk was formed by Harari.

- Moreover, at the time Harari founded SanDisk, he was well aware of WSI's research 111. into flash memory technology. Harari served as CTO of WSI, and thus headed WSI's research efforts on flash memory until February of 1988. As a director of WSI, Harari received reports regarding WSI's flash memory work until at least January 1990, more than a year after he founded SanDisk and improperly filed three patent applications employing STM technology.
- 112. From its inception and founding by Harari, SanDisk was in direct competition with WSI in the relevant markets. As an officer and/or director of WSI, Harari had an obligation to present WSI with any corporate opportunity appropriate for WSI. Harari's involvement with concerted action on behalf of SanDisk has seriously impeded STM's capacity to compete in the manufacture and sale of NAND flash memory products.
- Furthermore, in aid of SanDisk's monopolization, Harari assigned the '338, '032, and 113. '517 patents which resulted from his conversion of WSI technology to SanDisk, thereby benefitting a company in direct competition with WSI to which he owed fiduciary duties of loyalty and good faith. This conversion has resulted in injury to competition and to STM – the successor-in-interest to WSI – and eventually has led to the exclusion of STM from the relevant markets.
- 114. If SanDisk and Harari had not wrongfully converted the technology described above, STM would continue to be a viable competitor in the relevant markets. Moreover, but for SanDisk's

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and Harari's actions described above, other competitors such as Samsung would still be competitors—rather than licensees—of SanDisk in the relevant markets. SanDisk has used fraudulent patents and converted technology to exclude or suppress other flash memory competitors as well. As a result of SanDisk's and Harari's exclusionary actions, there is substantially less competition in the relevant markets, and SanDisk has been able to charge supra-competitive prices for flash chips and final flash products sold to members of the proposed Classes.

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THREATS TO COMPETITORS' PURCHASERS AND TERMINATION OF RITZ CAMERA TO PREVENT PURCHASER RELIEF

use of fraudulent patents to exclude them from the relevant markets, SanDisk has threatened members of the proposed Classes who purchase NAND flash memory from SanDisk's competitors, either directly or through its conduct. Members of the proposed Classes are faced with the prospect that they will be left holding large quantities of unusable NAND flash memory products manufactured by STM and others that refuse to license SanDisk's fraudulent technology (if SanDisk's infringement actions are successful). Either directly or through its conduct, SanDisk has also threatened members of the proposed Classes who purchase from SanDisk competitors that SanDisk will force them to purchase flash memory at disadvantageous prices and terms if they are later required to turn to SanDisk to purchase the necessary flash memory for their products. In a successful effort to drive customers from STM, SanDisk has also enforced document and deposition subpoenas against numerous STM customers.

116. Further, shortly after this lawsuit was filed, SanDisk retaliated against RCI, and the proposed Class it sought to represent, by terminating its supply of NAND flash memory to RCI. By

so doing, SanDisk has sought to exercise its monopoly to prevent this Court from learning about, and vindicating, legitimate claims as to substantial unlawful conduct by SanDisk. This is a further act to maintain unlawfully its monopoly. By so doing, SanDisk has sought to suppress RCI's attempt to show that SanDisk has systematically used fraudulent patents and stolen technology to exclude competition, dominate the relevant markets, and continue to injure members of the proposed Classes.

ANTICOMPETITIVE STM GLOBAL SETTLEMENT

117. In late 2009, SanDisk entered into a secret global agreement with STM settling federal and state litigation matters, which were captioned in this Court:

SanDisk Corp. v. STMicroelectronics, Inc., Case No. C 04-4379 JF, filed October 15, 2004; SanDisk Corp. v. STMicroelectronics, Inc., Case No. C 05-5021 JF, filed December 6, 2005; STMicroelectronics, Inc. v. Harari et al., Case No. C 05-4691 JF, filed November 16, 2005; and STMicroelectronics, Inc. v. Harari et al., Case No. C 08-2332 JF, filed May 6, 2008.

- This was after this Court and a California Superior Court had denied SanDisk's 118. summary judgment motions and readied the federal and state claims for trial.
- 119. The global settlement was not submitted to, nor approved by, this Court, and a comprehensive search of relevant public sources has not disclosed its terms. Neither party sponsored a press release announcing its terms, as is customary. In its 10-Q filing with the Securities and Exchange Commission on September 27, 2009, SanDisk only revealed it had settled all litigation on 'amicable and confidential" terms.

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STM through infringement actions based on its fraudulent patents and had driven it from the relevant

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Fourth Amended Complaint

markets thereby injuring competition.

121. Further, in October 2004, when SanDisk first began its assertion of infringement of

By March of 2008, SanDisk had succeeded in imposing \$20,000,000 in legal fees on

- the fraudulent "crown jewel" patents against STM, STM was preparing a manufacturing joint venture with Hynix, a leading semiconductor manufacturer, to expand STM's presence in the relevant markets. At the time, STM itself was the world's sixth largest flash memory supplier.
- 122. By March 2008, STM had been forced from the market by SanDisk and, upon information and belief, was not able to enter into the Hynix joint venture and mount a major competitive challenge to SanDisk. As a consequence, competition was injured.
- 123. Having eliminated STM as a partner with Hynix, SanDisk has entered into a joint venture with Hynix, thus further suppressing the possibility of any major competitive entry and further injuring competition.
- been used to entrench the SanDisk monopoly in the relevant markets. The settlement removed a legal and competitive threat to SanDisk's monopoly, while ensuring one of its most formidable competitors STM would pose no further competitive challenge, nor continue to challenge the fraudulent patents SanDisk has repeatedly used to suppress competition. It did nothing to cure SanDisk's anticompetitive conduct, or facilitate STM's re-entry into the relevant markets as a significant competitor. It appeared to put an end to the STM/Hynix joint venture. Far from promoting competition, the settlement cleared the way for SanDisk to further suppress competition and entrench its monopoly by replacing STM as the Hynix venture partner.

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125. Plaintiffs are seeking discovery relating to the global settlement agreement from both STM and SanDisk and will amend in due course as appropriate.

INJURY TO COMPETITION

- 126. Aided by Harari and SanDisk's controlled and licensed Toshiba joint venture, SanDisk has attempted to monopolize and monopolized the relevant markets with exclusionary patent fraud, technology conversion, infringement actions enforcing the fraudulently obtained patents against SanDisk's competitors, threats to competitor customers and termination of RCI, and an anticompetitive settlement. SanDisk also has succeeded in driving STM out of the relevant markets and prevented a major competitive challenge from a STM/Hynix joint venture.
- As a consequence of the monopolization, SanDisk has injured competition and 127. competitors, and SanDisk and the controlled and licensed Toshiba joint venture have sold flash chips and final flash products at above-competitive, monopoly prices to members of the proposed Classes.
- 128. As a further consequence of SanDisk obtaining the '338 and '517 patents by fraud, SanDisk has wrongfully extracted royalty fees from its licensees who manufacture and sell flash chips and final flash products. These royalty fees are passed on to purchasers of flash chips and final flash products in the form of above-competitive prices that would not be charged absent SanDisk's fraudulent acquisition and subsequent enforcement of the '338 and '517 patents.

CLASS PURCHASER STANDING

129. As a consequence of this very substantial diminution of competition and suppression of competitors, members of the proposed Classes have paid above-competitive, monopoly prices for flash chips and final flash products, and thus suffered antitrust injury.

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COUNT ONE

(Monopolization)

- 130. Plaintiffs incorporate the allegations of paragraphs 1 through 129 as though set forth here in their entirety.
- 131. SanDisk has monopolized the relevant markets, and maintained that monopoly, by fraudulent omissions and misrepresentations in connection with the filing and prosecution of the '338 and '517 patents, by conduct to exploit those invalid patents with infringement actions so as to exclude competition, by the conversion of WSI/STM technology so as to reduce competition in the relevant markets, by imposing licensing agreements on competing manufacturers and sellers of flash chips and final flash products, by threats to competitor customers and the termination of RCI, and by an anticompetitive settlement agreement, all in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.
- 132. SanDisk is engaged in interstate and foreign commerce, and the vast majority of its past, present, and future sales in the relevant markets has and will occur in such commerce.
- 133. As a direct and proximate result of SanDisk's unlawful conduct, competition in the relevant markets has been severely harmed through higher prices and reduced competition, quality, innovation, and consumer choice, to the detriment of consumers.
- 134. As a direct and proximate result of SanDisk's unlawful conduct, Plaintiffs and the other members of the proposed Classes have been injured in their business or property by the payment of above-competitive prices for flash chips and final flash products.

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COUNT TWO

(Attempted Monopolization)

and misrepresentations in connection with the filing and prosecution of the '338 and '517 patents, by

conduct to exploit those patents with infringement actions so as to exclude competition, by the

conversion of WSI/STM technology so as to reduce competition in the relevant markets, by imposing

licensing agreements on competing manufacturers and sellers flash chips and final flash products, by

threats to competitor customers and the termination of RCI, and by an anticompetitive settlement

agreement, all in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.

Plaintiffs incorporate the allegations of paragraphs 1 through 134 as though set forth

SanDisk has attempted to monopolize the relevant markets by fraudulent omissions

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here in their entirety.

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137. SanDisk's conduct has been undertaken in order to achieve and maintain a monopoly in the relevant markets. To the extent SanDisk has not already obtained monopoly power in the

relevant markets, there is a dangerous probability that it will succeed in obtaining such power.

- 138. SanDisk has acted with the specific intent to monopolize and destroy effective competition and/or control prices in the relevant markets.
- 139. SanDisk is engaged in interstate and foreign commerce, and the vast majority of its past, present, and future sales in the relevant markets have occurred and will occur in such commerce.
- 140. SanDisk's conduct has injured direct purchasers and competition. As a direct and proximate result of SanDisk's unlawful conduct, competition in the relevant markets has been severely harmed through higher prices and reduced competition, quality, innovation, and consumer choice, to the detriment of consumers.

Case4:10-cv-02787-SBA Document244 Filed09/24/14 Page38 of 39 JURY DEMAND Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs hereby demand a trial by jury in this action of all issues so triable. Fourth Amended Complaint Civ. No. 4:10-cv-2787 (SBA) -38-

1	Dated: September 24, 2014	Respectfully submitted,
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