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**UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA  
SOUTHERN DIVISION**

MEMORY TECHNOLOGIES, LLC,  
a Nevada company,

Plaintiff,

vs.

SANDISK LLC, a Delaware company,  
WESTERN DIGITAL  
CORPORATION, a Delaware  
company, WESTERN DIGITAL  
TECHNOLOGIES, INC., a Delaware  
company,

Defendants.

Case No. 8:16-cv-2163

**COMPLAINT FOR PATENT  
INFRINGEMENT**

**DEMAND FOR JURY TRIAL**

1 Plaintiff Memory Technologies, LLC (“MTL”) hereby alleges for its Complaint for  
2 patent infringement against SanDisk LLC, Western Digital Corporation, and Western  
3 Digital Technologies, Inc. (collectively “Defendants”) on personal knowledge as to its  
4 own actions and on information and belief as to the actions of others, as follows:

5 **THE PARTIES**

6 1. MTL is organized in Nevada and has its headquarters at 6787 W Tropicana  
7 Ave., Suite 238, Las Vegas, NV 89103. MTL is a subsidiary of Pendrell Corporation.  
8 MTL owns a worldwide patent portfolio that covers numerous memory technologies. As  
9 many as 81 of MTL’s patents belong to patent families containing patents essential to  
10 various memory and electronic storage standards, including the JEDEC eMMC standard<sup>1</sup>  
11 and SD Standard.<sup>2</sup> In the past three years, MTL has licensed the Asserted Patents to the  
12 major flash memory manufacturers in the world.

13 2. On information and belief, SanDisk LLC (“SanDisk”) is organized under the  
14 laws of the State of Delaware, with its principal place of business at 951 SanDisk Dr.,  
15 Milpitas, CA 95035. On information and belief, SanDisk LLC is a wholly owned  
16 subsidiary of Western Digital Corporation, which is also incorporated under the laws of  
17 the State of Delaware. On information and belief, SanDisk Corporation converted to  
18 SanDisk LLC this year, and references herein to “SanDisk” refer to the acts of both  
19 SanDisk LLC and its predecessor in interest, SanDisk Corporation. On information and  
20 belief, SanDisk is in the business of designing, developing, manufacturing, making,  
21 offering for sale, selling, using, selling in the United States after importation, selling for  
22 importation, and/or importing into the United States certain flash memory devices or their  
23 components, including certain SD Cards, microSD Cards, and eMMC memory.

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<sup>1</sup> The JEDEC eMMC standard refers to the JEDEC Embedded MultiMediaCard (e.MMC)  
26 e.MMC/Card Product Standard (JESD84-A441) or higher. MTL will use “eMMC” to  
27 refer to e.MMC as governed by the JEDEC e.MMC Standard in this complaint.

28 <sup>2</sup> The SD Standard refers to the Secure Digital Association Physical Layer Specification  
 (“SD Standard”).

1           3.     On information and belief, Western Digital Corporation is incorporated  
2 under the laws of the State of Delaware, with its principal place of business at 3355  
3 Michelson Drive, Suite 100, Irvine, CA 92612. On information and belief, as of May 12,  
4 2016, SanDisk became an indirect, wholly owned subsidiary of Western Digital  
5 Corporation. On information and belief, SanDisk is now a “Western digital brand,” and  
6 Western Digital Corporation or its affiliates are identified as holding the copyright on  
7 SanDisk’s website. *See* <https://www.sandisk.com/>.

8           4.     On information and belief, Western Digital Technologies, Inc. is  
9 incorporated under the laws of the State of Delaware, with its principal place of business  
10 at 951 SanDisk Drive, Milpitas, CA 95035. On information and belief, Western Digital  
11 Technologies, Inc. is a wholly owned subsidiary of Western Digital Corporation, and  
12 SanDisk is a wholly owned subsidiary of Western Digital Technologies, Inc. On  
13 information and belief, Western Digital Technologies, Inc. is also the seller of record and  
14 licensee in the Americas of SanDisk products. *See* <https://www.sandisk.com/>. SanDisk  
15 also identifies Western Digital Technologies, Inc.’s headquarters in Milpitas, California,  
16 as SanDisk’s headquarters. *See* <https://www.sandisk.com/about/contact/locations>.

17           5.     This is a patent infringement action by MTL to end Defendants’  
18 unauthorized, willful, and infringing manufacture, use, sale, offering to sell, and/or  
19 importing in the United States of products and components that incorporate MTL’s  
20 patented inventions, and to end Defendants’ active inducement of infringement by others  
21 in the United States of MTL’s patented inventions.

22           6.     MTL is the owner of the patents at issue in this action: U.S. Patent Nos.  
23 RE45,486 (“the 486 Patent”); RE45,542 (“the 542 Patent”); 9,063,850 (“the 850 Patent”);  
24 8,307,180 (“the 180 Patent”); and 7,565,469 (“the 469 Patent”), 7,275,186 (“the 186  
25 Patent”); 7,827,370 (“the 370 Patent”); and 7,739,487 (“the 487 Patent”) (collectively,  
26 the “Asserted Patents”).

1 7. MTL holds all substantial rights and interest in the Asserted Patents, as  
2 described below, including the exclusive right to sue Defendants for infringement and  
3 recover damages.

4 8. Defendants make, use, sell, offer to sell, and/or import in the United States  
5 systems and components of systems that infringe one or more claims of the Asserted  
6 Patents, and actively induce infringement by others of the same. MTL seeks monetary  
7 damages and prejudgment interest for Defendants' past and ongoing direct and indirect  
8 infringement of the Asserted Patents.

9 **JURISDICTION AND VENUE**

10 9. This civil action for patent infringement arises under the patent laws of the  
11 United States, 35 U.S.C. § 100 et seq., including in particular under 35 U.S.C. § 271. This  
12 Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

13 10. This Court has personal jurisdiction over Western Digital Corporation.  
14 Western Digital Corporation has systematic and continuous contacts with the forum,  
15 including because it conducts substantial business and is headquartered in California and  
16 this District at 3355 Michelson Drive, Suite 100, Irvine, CA 92612.

17 11. This Court has personal jurisdiction over Western Digital Technologies, Inc.  
18 Western Digital Technologies, Inc. has systematic and continuous contacts with the  
19 forum, including because, like its parent Western Digital Corporation, it conducts  
20 substantial business in California and this District and is headquartered in California.

21 12. This Court has personal jurisdiction over SanDisk. SanDisk has systematic  
22 and continuous contacts with the forum, including because, like its parent Western  
23 Digital Corporation, it conducts substantial business in California and this District and is  
24 headquartered in California.

25 13. Venue is proper in the Central District of California under 28 U.S.C.  
26 §§ 1391 and 1400(b), because Defendants do business in the district, have committed acts  
27 of infringement in the district, and because a substantial part of the events giving rise to  
28 MTL's claims against Defendants occurred and continue to occur in this District.

1           14. On information and belief, both Western Digital Corporation and Western  
2 Digital Technologies, Inc. (collectively “Western Digital”) conduct substantial business  
3 in this District. Western Digital makes, uses, sells, offers to sell, and/or imports, within  
4 this District, systems and components that infringe one or more of the Asserted Patents,  
5 and induces infringement by others within this District. Western Digital derives  
6 substantial revenue from the sale of infringing systems and components within the  
7 District, and/or expects or should reasonably expect its actions to have consequences  
8 within the District. Western Digital has committed and continues to commit acts of patent  
9 infringement in this District, including making, using, selling, offering to sell, and/or  
10 importing infringing systems and components within the District, and inducing  
11 infringement by others in this District, including by and through these activities described  
12 above that were and are undertaken in concert with SanDisk.

13           15. Moreover, on information and belief, Western Digital Corporation is  
14 headquartered at 3355 Michelson Drive, Suite 100, Irvine, CA 92612. Western Digital  
15 has established a significant presence in this forum by manufacturing, using, selling,  
16 offering to sell, and importing in this District SanDisk SD cards, SanDisk microSD cards,  
17 SanDisk eMMC memory, and/or products containing SanDisk eMMC memory that  
18 infringe one or more Asserted Patents in this action, or inducing such acts. For example,  
19 Western Digital offered a 32GB SanDisk SD Card with purchase of its My Passport  
20 Wireless Product. Additionally, Western Digital directly sells 32 GB SanDisk Extreme  
21 Pro SD UHS-I Cards on its website.

22           16. Additionally, on information and belief, according to publicly available  
23 documentation, Western Digital’s principal marketing, sales, and customer service  
24 decisions are made at Western Digital’s headquarters within this District. Furthermore,  
25 Western Digital’s finance and accounting departments, as well as its legal and executive  
26 offices are located at its headquarters within this District. On information and belief,  
27 because Western Digital Corporation’s headquarters are located within this District,  
28 Western Digital and SanDisk meet within this District at Western Digital Corporation’s

1 headquarters to discuss and make decisions regarding matters pertaining to the Accused  
2 Products, including but not limited to marketing, sales, and customer services of the  
3 Accused Products. Additionally, on information and belief, Western Digital induces  
4 others, including SanDisk and other third-parties, to infringe the Asserted Patents within  
5 this District, through, among other of its operations, its marketing, sales, and customer  
6 service operations. On information and belief, Western Digital and SanDisk jointly  
7 induce others to infringe the Asserted Patents from within this District through  
8 marketing, sales, and customer service operations.

9 17. SanDisk also makes, uses, sells, offers to sell, and/or imports its systems and  
10 components, including systems and components that infringe the Asserted Patents, and  
11 induces infringement by others within this District. SanDisk derives substantial revenue  
12 from the sale of such systems and components that are distributed within the District,  
13 and/or expects or should reasonably expect its actions to have consequences within the  
14 District. SanDisk has committed and continues to commit acts of patent infringement,  
15 including making, using, selling, offering to sell, and/or importing within this District  
16 systems and/or components that infringe one or more of the Asserted Patents, and  
17 inducing infringement by others in this District. SanDisk and Western Digital also act in  
18 partnership and/or in concert to make, sell, offer to sell, and import SanDisk and Western  
19 Digital co-branded products in this District that infringe one or more Asserted Patents.  
20 SanDisk has established a significant presence in this forum by manufacturing, using,  
21 selling, offering to sell, and importing into this District SD Cards, microSD Cards,  
22 eMMC memory, and/or products containing eMMC memory that infringe one or more  
23 Asserted Patents in this action.

#### 24 **THE ASSERTED PATENTS**

25 18. On June 2, 2015, the United States Patent and Trademark Office duly and  
26 legally issued U.S. Patent No. RE45,542 (“the 542 Patent”), entitled “Method and a  
27 System for Determining the Power Consumption in Connection with an Electronic  
28

1 Device, and an Electronic Device.” A copy of the 542 Patent is attached hereto as Exhibit  
2 1.

3 19. MTL owns all substantial right, title, and interest in the 542 Patent, and  
4 holds the right to sue and recover damages for infringement thereof, including past  
5 infringement.

6 20. On April 21, 2015, the United States Patent and Trademark Office duly and  
7 legally issued U.S. Patent No. RE45,486 (“the 486 Patent”), entitled “Method for  
8 Addressing a Memory Card, a System Using a Memory Card, and a Memory Card.” A  
9 copy of the 486 Patent is attached hereto as Exhibit 2.

10 21. MTL owns all substantial right, title, and interest in the 486 Patent, and  
11 holds the right to sue and recover damages for infringement thereof, including past  
12 infringement.

13 22. On July 21, 2009, the United States Patent and Trademark Office duly and  
14 legally issued U.S. Patent No. 7,565,469 (“the 469 Patent”), entitled “Multimedia Card  
15 Interface Method, Computer Program Product and Apparatus.” A copy of the 469 Patent  
16 is attached hereto as Exhibit 3.

17 23. MTL owns all substantial right, title, and interest in the 469 Patent, and  
18 holds the right to sue and recover damages for infringement thereof, including past  
19 infringement.

20 24. On June 23, 2015, the United States Patent and Trademark Office duly and  
21 legally issued U.S. Patent No. 9,063,850 (“the 850 Patent”), entitled “Extended  
22 Utilization Area for a Memory Device.” A copy of the 850 Patent is attached hereto as  
23 Exhibit 4.

24 25. MTL owns all substantial right, title, and interest in the 850 Patent, and  
25 holds the right to sue and recover damages for infringement thereof, including past  
26 infringement.

27 26. On November 6, 2012, the United States Patent and Trademark Office duly  
28 and legally issued U.S. Patent No. 8,307,180 (“the 180 Patent”), entitled “Extended

1 Utilization Area for a Memory Device.” A copy of the 180 Patent is attached hereto as  
2 Exhibit 5.

3 27. MTL owns all substantial right, title, and interest in the 180 Patent, and  
4 holds the right to sue and recover damages for infringement thereof, including past  
5 infringement.

6 28. On September 25, 2007, the United States Patent and Trademark Office duly  
7 and legally issued U.S. Patent No. 7,275,186 (“the 186 Patent”), entitled “Memory Bus  
8 Checking Procedure” A copy of the 186 Patent is attached hereto as Exhibit 6.

9 29. MTL owns all substantial right, title, and interest in the 186 Patent, and  
10 holds the right to sue and recover damages for infringement thereof, including past  
11 infringement.

12 30. On November 2, 2010, the United States Patent and Trademark Office duly  
13 and legally issued U.S. Patent No. 7,827,370 (“the 370 Patent”), entitled “Partial  
14 Permanent Write Protection of a Memory Card and Partially Permanently Write  
15 Protected Memory Card.” A copy of the 370 Patent is attached hereto as Exhibit 7.

16 31. MTL owns all substantial right, title, and interest in the 370 Patent, and  
17 holds the right to sue and recover damages for infringement thereof, including past  
18 infringement.

19 32. On June 15, 2010, the United States Patent and Trademark Office duly and  
20 legally issued U.S. Patent No. 7,739,487 (“the 487 Patent”), entitled “Method for Booting  
21 a Host Device From an MMC/SD Device, a Host Device Bootable from an MMC/SD  
22 Device and an MMC/SD Device Method a Host Device May Booted From.” A copy of  
23 the 487 Patent is attached hereto as Exhibit 8.

24 33. MTL owns all substantial right, title, and interest in the 487 Patent, and  
25 holds the right to sue and recover damages for infringement thereof, including past  
26 infringement.

27 34. As early as October 23, 2013, SanDisk was on notice of the Asserted Patents  
28 through discussions with MTL about the Asserted Patents or related patents. SanDisk was



1 further aware of the Asserted Patents and their applicability to SanDisk's products  
2 because SanDisk's memory joint-venture partner, Toshiba, took a license to the Asserted  
3 Patents in 2016. SanDisk is also aware that other of its competitors have taken licenses to  
4 the Asserted Patents for products that practice the same standards as the SanDisk memory  
5 products accused in this Complaint. SanDisk is on notice that its actions constituted and  
6 continue to constitute infringement of one or more claims of the Asserted Patents.

7 35. On information and belief, Western Digital was on notice of the Asserted  
8 Patents and that its actions constituted and continue to constitute infringement of the  
9 Asserted Patents as early as its acquisition of SanDisk and/or it entered discussions with  
10 MTL.

11 36. SanDisk was a founding member of the organization responsible for the SD  
12 Standard. *See* [https://www.sdcard.org/about\\_sda/index.html](https://www.sdcard.org/about_sda/index.html). SanDisk was also a member  
13 of the organization responsible for the JEDEC eMMC Standard. *See*  
14 [https://web.archive.org/web/20110505093640/http://www.jedec.org/about-](https://web.archive.org/web/20110505093640/http://www.jedec.org/about-jedec/member-list)  
15 [jedec/member-list](http://www.jedec.org/about-jedec/member-list). On information and belief, SanDisk was also on notice of the Asserted  
16 Patents and that its actions constituted and continue to constitute infringement of the  
17 Asserted Patents as early as those inventions were declared essential to the SD and/or the  
18 eMMC Standards.

19 **COUNT I:**

20 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. RE45,542**

21 37. MTL incorporates and realleges paragraphs 1 - 36 above as if fully set forth  
22 herein.

23 38. On information and belief, Defendants have infringed and continue to  
24 infringe one or more claims of the 542 Patent, including but not limited to Claim 38,  
25 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making,  
26 using, offering to sell, selling, and/or importing into the United States without authority  
27 SD and MicroSD Cards compliant with SD Specification Version 3.00 or higher with  
28

1 maximum current consumption greater than 200 mA, as well as Embedded Multimedia  
2 Card (“eMMC”) memory, including eMMC memory within Embedded Multichip  
3 Packages (“e.MCP” or “eMCP”), compliant with the JEDEC eMMC 4.41 (JESD84-  
4 A441) standard or higher (these SD Cards, microSD Cards, and eMMC memory are,  
5 collectively, the “542 Patent Accused Products”). The 542 Patent Accused Products  
6 include, for example and without limitation, the SanDisk Extreme Pro UHS-I SDXC  
7 Cards (SDSDXP-128G-A46), the SanDisk Extreme Plus microSDHC Cards (SDSDQX-  
8 016G-A46A), and iNAND 7232.

9 39. By way of example, on information and belief, each of the SD or microSD  
10 Cards that are 542 Patent Accused Product is a peripheral device comprising a memory  
11 storing a default value for power consumption (for example, 200mA) and a limiting value  
12 for power consumption (for example, 400mA, 600mA, and 800mA) of the peripheral  
13 device, and a connector configured to connect the peripheral device to an electronic  
14 device for supplying power to the peripheral device (for example, the power lines  $V_{SS1}$ ,  
15  $V_{DD}$ ,  $V_{SS2}$  of the SD card interface). *See* SD Specifications, Part 1, Physical Layer  
16 Specification, Version 3.00 (April 16, 2009), *available at*  
17 [forums.parallax.com/discussion/download/100220&d=](http://forums.parallax.com/discussion/download/100220&d=) at 14, 51 (“SD Specification  
18 3.00”). On information and belief, the maximum power consumption of the peripheral  
19 device is set at a startup stage to the default value (for example, power consumption is set  
20 to 200mA after initialization), and the limiting value, which is higher than the default  
21 value, is defined for the power consumption of the peripheral device (for example,  
22 400mA, 600mA, and 800mA). *Id.* at 51. On information and belief, each peripheral  
23 device also comprises a processor (for example, a controller) operable to set the  
24 maximum power consumption of the peripheral device to a value in the range from the  
25 default value to the limiting value—including the default and limiting value (for example,  
26 200mA to 800mA). *Id.* at 15, 51. On information and belief, each peripheral device is  
27 configured to receive information from the electronic device for setting the maximum  
28 power consumption of the peripheral device (for example, Switch Function Command,

1 CMD6, defines the current limit), and the processor operable to set the maximum power  
2 consumption is configured to obtain the value—as indicated by the received  
3 information—and to set the maximum power consumption of the peripheral device to the  
4 value (for example, a switch in power consumption occurs within 8 clocks after the end  
5 bit of status data). *Id.* at 48, 51, 60, 78.

6 40. As another example, on information and belief, each eMMC memory that is  
7 a 542 Patent Accused Product is a peripheral device comprising a memory storing a  
8 default value for power consumption (for example, 200 mA max peak current) and a  
9 limiting value for power consumption (for example, max peak currents of 220 mA to 550  
10 mA) of the peripheral device, and a connector configured to connect the peripheral device  
11 to an electronic device for supplying power to the peripheral device (for example, the  
12 power supply connector pins VCC and VCCQ on the eMMC interface). *See* JEDEC  
13 Embedded MultiMediaCard (e.MMC) e.MMC/Card Product Standard, (MMCA, 4.41),  
14 JESD84-A441 (March 2010) at 15, 50, 127, 138 (“JEDEC eMMC 4.41”). On information  
15 and belief, the maximum power consumption of the peripheral device is set at a startup  
16 stage to the default value (for example, power consumption is set to 200 mA max peak  
17 current after power-on or a software reset), and the limiting value, which is higher than  
18 the default value, is defined for the power consumption of the peripheral device (for  
19 example, max peak currents of 220 mA up to 550 mA). *Id.* at 50, 138. On information  
20 and belief, each peripheral device also comprises a processor (for example, a card  
21 interface controller) operable to set the maximum power consumption of the peripheral  
22 device to a value in the range from the default value to the limiting value—including the  
23 default and limiting value (for example, 200 mA to 550 mA max peak currents). *Id.* at 16,  
24 138, 141. On information and belief, each peripheral device is configured to receive  
25 information from the electronic device for setting the maximum power consumption of  
26 the peripheral device (for example, SWITCH Command, CMD6), and the processor  
27 operable to set the maximum power consumption is configured to obtain the value—as  
28 indicated by the received information—and to set the maximum power consumption of

1 the peripheral device to the value (for example, a SWITCH command changes the power  
2 class by changing registers). *Id.* at 50, 87, 138, 141.

3 41. On information and belief, Defendants have induced and continue to induce  
4 infringement of one more claims of the 542 Patent, including but not limited to Claim 38,  
5 pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as users, customers,  
6 distributors, wholesalers, retailers, affiliates, parents, subsidiaries, importers, or sellers to  
7 make, use, offer to sell, sell, and/or import into the United States without authorization  
8 the 542 Patent Accused Products. The making, using, offering to sell, selling, and/or  
9 importing into the United States constitutes direct infringement, literally or under the  
10 doctrine of equivalents, of one or more claims of the 542 Patent by such third parties.  
11 Defendants' acts of inducement include: providing the 542 Patent Accused Products or  
12 components thereof to third parties and intending them to make, use, offer to sell, sell,  
13 and/or import the 542 Patent Accused Products; advertising the 542 Patent Accused  
14 Products in the United States and encourages the sale and offer for sale of the 542 Patent  
15 Accused Products by other entities by listing stores where SanDisk products, including  
16 specifically the Accused Products, can be purchased (for example,  
17 <https://www.sandisk.com/home>; <https://www.sandisk.com/oem-design/mobile/inand>;  
18 <https://www.sandisk.com/about/where-to-buy>; [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/sd-cards/extremepro-sd-uhs-i)  
19 [cards/sd-cards/extremepro-sd-uhs-i](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd);  
20 [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)  
21 [cards/microsd-cards/extremeplus-microsd](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)); encouraging third parties to communicate  
22 directly with Defendants' representatives and providing information about the 542 Patent  
23 Accused Products for purposes of technical assistance, design, replacement, sales, and  
24 marketing of the 542 Patent Accused Products (for example, <http://kb.sandisk.com/> and  
25 links therein; <https://www.sandisk.com/oem-design/mobile/inand>;  
26 <https://pct1.sandisk.com/NewSearch.aspx>; <https://link.sandisk.com/welcome.html>).

27 42. Defendants proceeded in this manner despite knowledge of the 542 Patent  
28 and their knowledge that specific actions they actively induced and continue to actively  
induce on the part of third parties constitute infringement of the 542 Patent. The

1 Defendants had knowledge of the 542 Patent and the infringement of the 542 Patent as  
2 early as described in paragraphs 34-36. At the very least, because Defendants have been  
3 and remain on notice of the 542 Patent and the accused infringement, they have been and  
4 remain willfully blind regarding the infringement they have induced and continue to  
5 induce.

6 43. MTL has suffered and continues to suffer damages as a result of Defendants'  
7 infringement of the 542 Patent.

8 44. Defendants' infringement of the 542 Patent has been and continues to be  
9 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
10 knowledge of the 542 Patent and the infringement of the 542 Patent as early as described  
11 in paragraphs 34-36, and have proceeded to infringe the 542 Patent with full knowledge  
12 of that patent and its applicability to SanDisk's products. Defendants' intentional,  
13 knowing, egregious, culpable, willful, wanton, malicious, bad faith, deliberate,  
14 consciously wrongful, and/or flagrant infringement entitles MTL to increased damages  
15 under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action  
16 under 35 U.S.C. § 285.

17 **COUNT II:**

18 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. RE45,486**

19 45. MTL incorporates and realleges paragraphs 1 - 44 above as if fully set forth  
20 herein.

21 46. On information and belief, Defendants have infringed and continue to  
22 infringe one or more claims of the 486 Patent, including but not limited to Claims 6, 9-  
23 11, 22, 23, 26, and 27 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of  
24 equivalents, by making, using, offering to sell, selling, and/or importing into the United  
25 States without authority High Capacity (HC) and Extended Capacity (XC) microSD and  
26 SD Cards compliant with SD Specification Version 2.00 or higher, as well as eMMC  
27 memory, including eMMC memory within eMCP, that is compliant with the JEDEC  
28

1 eMMC 4.41 (JESD84-A441) standard or higher (these SD Cards, microSD Cards, and  
2 eMMC memory devices are, collectively, the “486 Patent Accused Products”). The 486  
3 Patent Accused Products include, for example and without limitation, the SanDisk  
4 Extreme Pro UHS-I SDXC Cards (SDSDXP-128G-A46), the SanDisk Extreme Plus  
5 microSDHC Cards (SDSDQX-016G-A46A), and iNAND 7232.

6 47. By way of example, on information and belief, each SD or microSD Card  
7 that is a 486 Patent Accused Product is a memory card comprising several memory  
8 locations for storing data (for example, physical areas on the memory to store one byte),  
9 the memory card stores at least one parameter (for example, the C\_SIZE parameter is  
10 stored in the CSD register), and the memory card is configured so that the number of  
11 memory locations of the memory card can be calculated on the basis of the at least one  
12 parameter (for example, memory capacity = (C\_SIZE + 1) \* 512K byte). *See* SD  
13 Specifications, Part 1, Physical Layer Simplified Specification, Version 2.00 (Sep. 25,  
14 2006), *available at*  
15 [http://users.ece.utexas.edu/~valvano/EE345M/SD\\_Physical\\_Layer\\_Spec.pdf](http://users.ece.utexas.edu/~valvano/EE345M/SD_Physical_Layer_Spec.pdf) at 73, 86-87  
16 (“SD Specification 2.00”). On information and belief, each memory card is configured so  
17 that a specific number of bits is reserved for said at least one parameter (for example, 22  
18 bits are reserved in the CSD Register for the C\_SIZE parameter) and is configured to  
19 have stored therein an addressing data (for example, the value of Bit 30 of the OCR  
20 register) that is indicative of at least one addressing method supported (for example,  
21 block address format or byte address format). *Id.* at 41, 74. On information and belief, the  
22 addressing data indicates either a basic addressing method (for example, if Bit 30 is 0, the  
23 memory card is a Standard Capacity SD Memory Card and uses byte address format) or  
24 an expanded addressing method (for example, if Bit 30 is 1, the memory card is High  
25 Capacity SD Memory Card and uses block address format), and the expanded addressing  
26 method enables the addressing of data in a larger number of memory locations than the  
27 basic addressing method (for example, in block address format in High Capacity SD  
28 Memory Cards the data is addressed in block units of 512 bytes and in byte address

1 format in Standard Capacity SD Memory Cards the data is addressed in byte units). *Id.* at  
2 41, 50-51, 74.

3 48. Moreover, on information and belief, each SD or microSD Card that is a 486  
4 Patent Accused Product is a memory card wherein data is arranged to be stored and read  
5 in the memory card block-by-block (for example, single or multiple block read or write).  
6 *Id.* at 18.

7 49. Additionally, on information and belief, each SD or microSD Card that is a  
8 486 Patent Accused Product is a memory card wherein the memory locations of one  
9 block are arranged to be addressed with one address (for example, block address format).  
10 *Id.* at 41.

11 50. On information and belief, each SD or microSD Card that is a 486 Patent  
12 Accused Product is a memory card wherein the basic addressing method supports  
13 addressing only one memory location with one address (for example, byte address  
14 format). *Id.* at 41.

15 51. Moreover, on information and belief, each SD or microSD Card that is a 486  
16 Patent Accused Product is a memory card wherein the expanded addressing method  
17 supports a higher memory capacity than the basic addressing method (for example, High  
18 Capacity compared to Standard Capacity SD or microSD Cards). *Id.* at 41.

19 52. Additionally, on information and belief, each SD or microSD Card that is a  
20 486 Patent Accused Product is a memory card that further comprises a register for storing  
21 the addressing data (for example, the OCR Register). *Id.* at 74.

22 53. On information and belief, each SD or microSD Card that is a 486 Patent  
23 Accused Product is a memory card wherein the stored addressing data comprises one bit  
24 (for example, Bit 30 of the OCR Register). *Id.*

25 54. As another example, on information and belief, each eMMC memory device  
26 that is a 486 Patent Accused Product is a memory card comprising several memory  
27 locations for storing data (for example, physical areas on the memory to store one byte),  
28 the memory card stores at least one parameter (for example, the SEC\_COUNT parameter

1 is stored in the Extended CSD register), and the memory card is configured so that the  
2 number of memory locations of the memory card can be calculated on the basis of the at  
3 least one parameter (for example, device density = (SEC\_COUNT) x 512B). *See* JEDEC  
4 eMMC 4.41 at 24, 113, 126, 136. On information and belief, each memory card is  
5 configured so that a specific number of bits is reserved for said at least one parameter (for  
6 example, bytes [215:212] of the Extended CSD Register are reserved for the  
7 SEC\_COUNT parameter) and is configured to have stored therein an addressing data (for  
8 example, the OCR register bits [30:29] store values indicate the Access Mode) that is  
9 indicative of at least one addressing method supported (for example, byte mode or sector  
10 mode). *Id.* at 44, 113, 126. On information and belief, the addressing data indicates either  
11 a basic addressing method (for example, 00b indicates byte access mode) or an expanded  
12 addressing method (10b indicates sector access mode), and the expanded addressing  
13 method enables the addressing of data in a larger number of memory locations than the  
14 basic addressing method (for example, in sector access mode the minimum addressable  
15 unit is 512 bytes and in byte access mode the minimum addressable unit is one byte). *Id.*  
16 at 14, 44, 113, 119, 126.

17 55. Moreover, on information and belief, each eMMC memory device that is a  
18 486 Patent Accused Product is a memory card wherein the memory card is a memory  
19 card according to the MultiMediaCard specifications. *See generally id.*

20 56. On information and belief, Defendants have induced and continue to induce  
21 infringement of one more claims of the 486 Patent, including but not limited to Claim 6,  
22 pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as users, customers,  
23 distributors, wholesalers, retailers, affiliates, parents, subsidiaries, importers, or sellers to  
24 make, use, offer to sell, sell, and/or import into the United States without authorization  
25 the 486 Patent Accused Products. The making, using, offering to sell, selling, and/or  
26 importing into the United States constitutes direct infringement, literally or under the  
27 doctrine of equivalents, of one or more claims of the 486 Patent by such third parties.  
28 Defendants' acts of inducement include: providing the 486 Patent Accused Products or



1 components thereof to third parties and intending them to make, use, offer to sell, sell,  
2 and/or import the 486 Patent Accused Products; advertising the 486 Patent Accused  
3 Products in the United States and encourages the sale and offer for sale of the 486 Patent  
4 Accused Products by other entities by listing stores where SanDisk products, including  
5 specifically the Accused Products, can be purchased (for example,  
6 <https://www.sandisk.com/home>; <https://www.sandisk.com/oem-design/mobile/inand>;  
7 <https://www.sandisk.com/about/where-to-buy>; [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/sd-cards/extremepro-sd-uhs-i)  
8 [cards/sd-cards/extremepro-sd-uhs-i](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd);  
9 [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)  
10 [cards/microsd-cards/extremeplus-microsd](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)); encouraging third parties to communicate  
11 directly with Defendants' representatives and providing information about the 486 Patent  
12 Accused Products for purposes of technical assistance, design, replacement, sales, and  
13 marketing of the 486 Patent Accused Products (for example, <http://kb.sandisk.com/> and  
14 links therein; <https://www.sandisk.com/oem-design/mobile/inand>;  
15 <https://pct1.sandisk.com/NewSearch.aspx>; <https://link.sandisk.com/welcome.html>).

16 57. Defendants proceeded in this manner despite knowledge of the 486 Patent  
17 and their knowledge that specific actions they actively induced and continue to actively  
18 induce on the part of third parties constitute infringement of the 486 Patent. The  
19 Defendants had knowledge of the 486 Patent and the infringement of the 486 Patent as  
20 early as described in paragraphs 34-36. At the very least, because Defendants have been  
21 and remain on notice of the 486 Patent and the accused infringement, they have been and  
22 remain willfully blind regarding the infringement they have induced and continue to  
23 induce.

24 58. MTL has suffered and continues to suffer damages as a result of Defendants'  
25 infringement of the 486 Patent.

26 59. Defendants' infringement of the 486 Patent has been and continues to be  
27 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
28 knowledge of the 486 Patent and the infringement of the 486 Patent as early as described  
in paragraphs 34-36, and have proceeded to infringe the 486 Patent with full knowledge

1 of that patent and its applicability to SanDisk's products. Defendants' intentional,  
2 knowing, egregious, culpable, willful, wanton, malicious, bad faith, deliberate,  
3 consciously wrongful, and/or flagrant infringement entitles MTL to increased damages  
4 under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action  
5 under 35 U.S.C. § 285.

6 **COUNT III:**

7 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 7,565,469**

8 60. MTL incorporates and realleges paragraphs 1 - 59 above as if fully set forth  
9 herein.

10 61. On information and belief, Defendants have infringed and continue to  
11 infringe one or more claims of the 469 Patent, including but not limited to Claim 19,  
12 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making,  
13 using, offering to sell, selling, and/or importing into the United States without authority  
14 SD and MicroSD Cards compliant with SD Specification Version 3.00 or higher with  
15 CMD23 (SET\_BLOCK\_COUNT) functionality, as well as eMMC memory, including  
16 eMMC memory within eMCP, compliant with the JEDEC eMMC 4.41 (JESD84-A441)  
17 standard or higher (these SD, microSD, and eMMC memory devices are, collectively, the  
18 "469 Patent Accused Products"). The 469 Patent Accused Products include, for example  
19 and without limitation, the SanDisk Extreme Pro UHS-I SDXC Cards (SDSDXP-128G-  
20 A46), SanDisk Extreme Plus microSDHC Cards (SDSDQX-016G-A46A), and iNAND  
21 7232.

22 62. By way of example, on information and belief, each SD or microSD Card  
23 that is a 469 Patent Accused Product is a memory device comprising a bus interface  
24 configured to be coupled to a host through a bus having a data signal line (for example,  
25 the SD card nine-line bus interface is configured to be coupled to an SD Memory Card  
26 Host and has four data signal lines, DAT0-3), and the bus interface comprises a driver at  
27 the memory device coupled to a data signal line and a receiver at the memory device  
28

1 coupled to a data signal line (for example, each data line is bidirectional and so each must  
2 be coupled to a driver to send data and a receiver to receive data). SD Specification 3.00  
3 at 141; SanDisk microSD, microSDHC and microSDXC Cards OEM Product Manual,  
4 No. 80-36-03335, Revision 2.5 (Sept. 2015) at 10 (“OEM Product Manual”). On  
5 information and belief, the receiver is operable to receive information comprising a first  
6 information portion and a second information portion from the host over the data signal  
7 line (for example, a first and second data block) within a command execution (for  
8 example, within a CMD25 multiple block write operation), and the driver is operable to  
9 drive a change of state of the data signal line to the host within the command execution  
10 (for example, the SD Card is operable to drive the data signal line from HIGH to LOW,  
11 “busy,” within the CMD25 command execution). SD Specification 3.00 at 11, 38, 74. On  
12 information and belief, the bus interface also comprises a controller coupled to the driver  
13 and to the receiver (for example, the card interface controller) that is operable to cause  
14 the change of state of the data signal line to have a first meaning after receiving the first  
15 information portion within the command execution and to have a second meaning  
16 different from the first meaning after receiving the second information portion within the  
17 command execution from the host over the data signal line (for example, when CMD23 is  
18 used in conjunction with CMD25, after receiving any data block other than the final data  
19 block the data signal line is held LOW for the duration of time that the buffers are busy  
20 (up to 250 ms) and the meaning of the change of state of the data signal line from HIGH  
21 to LOW is “buffer busy”, and after receiving the final data block the data signal line is  
22 held LOW for the duration of time that the card is in the programming state (up to 500  
23 ms) and the meaning of the change of state of the data signal line from HIGH to LOW is  
24 “programming busy”). SD Specification 3.00 at 11, 15, 34, 38, 67, 74, 87, 122; OEM  
25 Product Manual at 1.

26         63. As another example, on information and belief, each eMMC memory device  
27 that is a 469 Patent Accused Product is a memory device comprising a bus interface  
28 configured to be coupled to a host through a bus having a data signal line (for example,

1 the eMMC device has a bus interface with ten communication lines configured to be  
2 coupled to a MultiMediaCard Host and has eight data signal lines, DAT0:7), and the bus  
3 interface comprises a driver at the memory device coupled to a data signal line and a  
4 receiver at the memory device coupled to a data signal line (for example, each data line is  
5 bidirectional and so each must be coupled to a driver to transmit data and a receiver to  
6 receive data). *See* JEDEC eMMC 4.41 at 163. On information and belief, the receiver is  
7 operable to receive information comprising a first information portion and a second  
8 information portion from the host over the data signal line (for example, a first and  
9 second data block) within a command execution (for example, within a  
10 WRITE\_MULTIPLE\_BLOCK CMD25 operation), and the driver is operable to drive a  
11 change of state of the data signal line to the host within the command execution (for  
12 example, the eMMC device is operable to generate a busy signal on the data signal line  
13 within the CMD25 command execution). *Id.* at 19, 89, 163, 182. On information and  
14 belief, the bus interface also comprises a controller coupled to the driver and to the  
15 receiver (for example, the card interface controller) that is operable to cause the change  
16 of state of the data signal line to have a first meaning after receiving the first information  
17 portion within the command execution and to have a second meaning different from the  
18 first meaning after receiving the second information portion within the command  
19 execution from the host over the data signal line (for example, after receiving any data  
20 block other than the final data block the meaning of the change of state of the data signal  
21 line is “buffer busy,” and after receiving the final data block the meaning of the change of  
22 state of the data signal line is “programming busy”). *Id.* at 16, 107.

23         64. On information and belief, Defendants have induced and continue to induce  
24 infringement of one more claims of the 469 Patent, including but not limited to Claim 19,  
25 pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as users, customers,  
26 distributors, wholesalers, retailers, affiliates, parents, subsidiaries, importers, or sellers to  
27 make, use, offer to sell, sell, and/or import into the United States without authorization  
28 the 469 Patent Accused Products. The making, using, offering to sell, selling, and/or

1 importing into the United States constitutes direct infringement, literally or under the  
2 doctrine of equivalents, of one or more claims of the 469 Patent by such third parties.  
3 Defendants' acts of inducement include: providing the 469 Patent Accused Products or  
4 components thereof to third parties and intending them to make, use, offer to sell, sell,  
5 and/or import the 469 Patent Accused Products; advertising the 469 Patent Accused  
6 Products in the United States and encourages the sale and offer for sale of the 469 Patent  
7 Accused Products by other entities by listing stores where SanDisk products, including  
8 specifically the Accused Products, can be purchased (for example,  
9 <https://www.sandisk.com/home>; <https://www.sandisk.com/oem-design/mobile/inand>;  
10 <https://www.sandisk.com/about/where-to-buy>; [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/sd-cards/extremepro-sd-uhs-i)  
11 [cards/sd-cards/extremepro-sd-uhs-i](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd);  
12 [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)  
13 [cards/microsd-cards/extremeplus-microsd](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)); encouraging third parties to communicate  
14 directly with Defendants' representatives and providing information about the 469 Patent  
15 Accused Products for purposes of technical assistance, design, replacement, sales, and  
16 marketing of the 469 Patent Accused Products (for example, <http://kb.sandisk.com/> and  
17 links therein; <https://www.sandisk.com/oem-design/mobile/inand>;  
18 <https://pct1.sandisk.com/NewSearch.aspx>; <https://link.sandisk.com/welcome.html>).

19 65. Defendants proceeded in this manner despite knowledge of the 469 Patent  
20 and their knowledge that specific actions they actively induced and continue to actively  
21 induce on the part of third parties constitute infringement of the 469 Patent. The  
22 Defendants had knowledge of the 469 Patent and the infringement of the 469 Patent as  
23 early as described in paragraphs 34-36. At the very least, because Defendants have been  
24 and remain on notice of the 469 Patent and the accused infringement, they have been and  
25 remain willfully blind regarding the infringement they have induced and continue to  
26 induce.

27 66. MTL has suffered and continues to suffer damages as a result of  
28 Defendants' infringement of the 469 Patent.



1 access profiles (for example, Speed Class profiles Class 2, Class 4, Class 6, and Class 10)  
2 to determine how access to the memory device is configured for at least one usage of the  
3 memory device (for example, a write using a Speed Class), and a controller configured to  
4 receive at least one first command (for example, a card interface controller) to activate at  
5 least one of the one more predefined access profiles associated with the memory device  
6 (for example, Initialization Command ACMD41 activates at least one Speed Class profile  
7 by setting the XPC bit, command frame bit 36, to 1) and to receive at least one second  
8 command (for example, CMD20, the Speed Class Control Command) to configure access  
9 to the memory device in accordance with the at least one of the one more predefined  
10 access profiles such that at least a portion of the memory device is configured according  
11 to the at least one of the more or more predefined access profiles for the at least one  
12 usage (for example, CMD20 configures the Allocation Units, “AUs,” which are portions  
13 of the user area of the memory device, such that the host writes sequentially in an AU  
14 according to the Speed Class Profile to ensure recording meets the minimum performance  
15 rate). SD Specification 3.00 at 7, 15, 27, 89, 93, 108-09, 113-15, 117-19.

16 71. As another example, on information and belief, each eMMC memory device  
17 that is a 850 Patent Accused Product is a memory device comprising one more predefined  
18 access profiles (for example, an eMMC device has up to 15 contexts and has context  
19 configuration information that may be associated with a context) to determine how access  
20 to the memory device is configured for at least one usage of the memory device (for  
21 example, a read or write), and a controller configured to receive at least one first  
22 command (for example, an eMMC Device Controller) to activate at least one of the one  
23 more predefined access profiles associated with the memory device (for example, CMD6  
24 writes a non-zero value into bits [1:0] of a context configuration register) and to receive  
25 at least one second command (for example, CMD23) to configure access to the memory  
26 device in accordance with the at least one of the one more predefined access profiles such  
27 that at least a portion of the memory device is configured according to the at least one of  
28 the more or more predefined access profiles for the at least one usage (for example,

1 CMD23 with the subsequent read and/or write commands defines a portion of the  
2 memory to be configured in accordance with the designated context). JEDEC Embedded  
3 MultiMediaCard (e.MMC), Electrical Standard 4.51, JESD84-B451 (June 2012) at 7, 41,  
4 81, 103, 105, 149, 152, 184 (“JEDEC eMMC 4.51”).

5 72. On information and belief, the memory device comprises an embedded  
6 MultiMedia Card (eMMC) device.

7 73. On information and belief, Defendants have induced and continue to induce  
8 infringement of one more claims of the 850 Patent, including but not limited to Claim 10,  
9 pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as users, customers,  
10 distributors, wholesalers, retailers, affiliates, parents, subsidiaries, importers, or sellers to  
11 make, use, offer to sell, sell, and/or import into the United States without authorization  
12 the 850 Patent Accused Products. The making, using, offering to sell, selling, and/or  
13 importing into the United States constitutes direct infringement, literally or under the  
14 doctrine of equivalents, of one or more claims of the 850 Patent by such third parties.  
15 Defendants’ acts of inducement include: providing the 850 Patent Accused Products or  
16 components thereof to third parties and intending them to make, use, offer to sell, sell,  
17 and/or import the 850 Patent Accused Products; advertising the 850 Patent Accused  
18 Products in the United States and encourages the sale and offer for sale of the 850 Patent  
19 Accused Products by other entities by listing stores where SanDisk products, including  
20 specifically the Accused Products, can be purchased (for example,  
21 <https://www.sandisk.com/home>; <https://www.sandisk.com/oem-design/mobile/inand>;  
22 <https://www.sandisk.com/about/where-to-buy>; [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/sd-cards/extremepro-sd-uhs-i)  
23 [cards/sd-cards/extremepro-sd-uhs-i](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd);  
24 [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)  
25 [cards/microsd-cards/extremeplus-microsd](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)); encouraging third parties to communicate  
26 directly with Defendants’ representatives and providing information about the 850 Patent  
27 Accused Products for purposes of technical assistance, design, replacement, sales, and  
28 marketing of the 850 Patent Accused Products (for example, <http://kb.sandisk.com/> and



1 links therein; <https://www.sandisk.com/oem-design/mobile/inand;>  
2 <https://pct1.sandisk.com/NewSearch.aspx>; <https://link.sandisk.com/welcome.html>).

3 74. Defendants proceeded in this manner despite knowledge of the related 180  
4 Patent and the 850 Patent and their knowledge that specific actions they actively induced  
5 and continue to actively induce on the part of third parties constitute infringement of the  
6 850 Patent. The Defendants had knowledge of the 850 Patent and the related 180 Patent,  
7 and the infringement of the 850 Patent as early as as described in paragraphs 34-36. At  
8 the very least, because Defendants have been and remain on notice of the 850 Patent and  
9 the accused infringement, they have been and remain willfully blind regarding the  
10 infringement they have induced and continue to induce.

11 75. MTL has suffered and continues to suffer damages as a result of  
12 Defendants' infringement of the 850 Patent.

13 76. Defendants' infringement of the 850 Patent has been and continues to be  
14 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
15 knowledge of the 850 Patent and the related 180 Patent and the infringement of the 850  
16 Patent as early as described in paragraphs 34-36, and have proceeded to infringe the 850  
17 Patent with full knowledge of that patent and its applicability to SanDisk's products.  
18 SanDisk's intentional, knowing, egregious, culpable, willful, wanton, malicious, bad  
19 faith, deliberate, consciously wrongful, and/or flagrant infringement entitles MTL to  
20 increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in  
21 prosecuting this action under 35 U.S.C. § 285.

22 **COUNT V:**

23 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 8,307,180**

24 77. MTL incorporates and realleges paragraphs 1 - 76 above as if fully set forth  
25 herein.

26 78. On information and belief, Defendants have infringed and continue to  
27 infringe one or more claims of the 180 Patent, including but not limited to Claim 17-19,  
28

1 21, 22, and 27, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of  
2 equivalents, by making, using, offering to sell, selling, and/or importing into the United  
3 States without authority SD and microSD Cards compliant with SD Specification  
4 Version 3.00 or higher with Speed Class Control Command Functionality, as well as  
5 eMMC memory, including eMMC memory within eMCP, compliant with the JEDEC  
6 eMMC 4.51 (JESD84-B451) standard or higher (these SD Cards, microSD Cards, and  
7 eMMC memory devices are, collectively, the “180 Patent Accused Products”). The 180  
8 Patent Accused Products include, for example and without limitation, SanDisk Extreme  
9 Pro UHS-I SDXC Cards (SDSDXP-128G-A46), SanDisk Extreme Plus microSDHC  
10 Cards (SDSDQX-016G-A46A), and iNAND 7232.

11 79. By way of example, on information and belief, each SD or microSD Card  
12 that is a 180 Patent Accused Product is a memory device comprising one more registers  
13 for storing one or more predefined access profiles associated with the memory device (for  
14 example, SSR register stores one more predefined access profiles in SPEED\_CLASS),  
15 and the predefined access profiles (for example, Speed Class profiles Class 2, Class 4,  
16 Class 6, and Class 10) are effective for determining how access to the memory device is  
17 configured for at least one usage (for example, a write using a Speed Class). SD  
18 Specification 3.00 at 7, 15, 89-90. On information and belief, the memory device also  
19 comprises a controller (for example, a card interface controller) for receiving one or more  
20 commands related to at least one usage of said memory device (for example, via the  
21 CMD line), and the one or more commands activate the one or more predefined access  
22 profiles associated with the memory device (for example, Initialization Command  
23 ACMD41 activates at least one Speed Class profile by setting the XPC bit, command  
24 frame bit 36, to 1). *Id.* at 15, 27, 90. On information and belief, the controller is also for  
25 configuring access to the memory device in accordance with at least one of the  
26 predefined access profiles so that the memory device is effective for the at least one  
27 usage (for example, CMD20, the Speed Class Control Command, configures the  
28 Allocation Units, “AUs,” which are portions of the user area of the memory device, such

1 that the host writes sequentially in an AU according to the Speed Class Profile to ensure  
2 recording meets the minimum performance rate). *Id.* at 93, 108-09, 113-15, 117-19.

3 80. On information and belief, one or more access profiles correspond to at least  
4 one of a random and a sequential mode of access (for example, the Speed Class host  
5 writes sequentially in an AU). *Id.* at 109, 113, 115.

6 81. On information and belief, one or more access profiles corresponds to at  
7 least one of a read, a write, an erase, and a modify attribute operation (for example, the  
8 Speed Class host writes sequentially in an AU). *Id.* at 109, 113, 115.

9 82. On information and belief, one or more access profiles are adapted to  
10 produce an optimized performance associated with said memory device (for example, a  
11 Speed Class Profile ensures recording meets the minimum performance rate). *Id.* at 7,  
12 117.

13 83. On information and belief, the performance is optimized in accordance with  
14 at least one of: data throughput, lifetime, and power consumption associated with the  
15 memory device (for example, a Speed Class Profile ensures recording meets the  
16 minimum performance rate). *Id.* at 7, 117.

17 84. On information and belief, one or more access profiles are associated with  
18 one or more partitions of the memory device (for example, the AUs are physical  
19 boundaries of the memory device and are partitions of the memory device). *Id.* at 93, 108.

20 85. As another example, on information and belief, each eMMC memory device  
21 that is a 180 Patent Accused Product is a memory device comprising one more registers  
22 for storing one or more predefined access profiles associated with the memory device (for  
23 example, up to fifteen registers, CONTEXT\_CONF[51:37], available to store context  
24 configuration information), and the predefined access profiles (for example, an eMMC  
25 device has up to 15 contexts and has context configuration information that may be  
26 associated with a context) are effective for determining how access to the memory device  
27 is configured for at least one usage (for example, a read or write). JEDEC eMMC 4.51 at  
28 81, 152, 184. On information and belief, the memory device also comprises a controller

1 for receiving one or more commands (for example, an eMMC Device Controller) related  
2 to at least one usage of said memory device, and the one or more commands activate the  
3 one or more predefined access profiles associated with the memory device (for example,  
4 CMD6 writes a non-zero value into bits [1:0] of a context configuration register). *Id.* at 7,  
5 41, 81, 103, 149, 184. On information and belief, the controller is also for configuring  
6 access to the memory device in accordance with at least one of the predefined access  
7 profiles so that the memory device is effective for the at least one usage (for example,  
8 CMD23 with the subsequent read and/or write commands defines a portion of the  
9 memory to be configured in accordance with the designated context). *Id.* at 81, 105.

10 86. On information and belief, one or more access profiles correspond to at least  
11 one of a random and a sequential mode of access (for example, the Large Unit context  
12 flag indicates if the context is following Large Unit rules, and the Large Unit is the  
13 smallest unit that can be used for large sequential read/write operations). *Id.* at 81-82,  
14 184.

15 87. On information and belief, one or more access profiles corresponds to at  
16 least one of a read, a write, an erase, and a modify attribute operation (for example, a  
17 context can be configured as a read-only context, a write-only context, or a read/write  
18 context). *Id.* at 81-82, 184.

19 88. On information and belief, one or more access profiles are adapted to  
20 produce an optimized performance associated with said memory device (for example, a  
21 Speed Class Profile ensures recording meets the minimum performance rate). *Id.* at 7,  
22 117.

23 89. On information and belief, the performance is optimized in accordance with  
24 at least one of: data throughput, lifetime, and power consumption associated with the  
25 memory device (for example, for a large, sequential write pattern, all of the commands  
26 that fill a unit work faster because they can reduce overhead). *Id.* at 81.

27 90. On information and belief, Defendants have induced and continue to induce  
28 infringement of one more claims of the 180 Patent, including but not limited to Claim 17-

1 19, 21, 22, and 27, pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as  
2 users, customers, distributors, wholesalers, retailers, affiliates, parents, subsidiaries,  
3 importers, or sellers to make, use, offer to sell, sell, and/or import into the United States  
4 without authorization the 180 Patent Accused Products. The making, using, offering to  
5 sell, selling, and/or importing into the United States constitutes direct infringement,  
6 literally or under the doctrine of equivalents, of one or more claims of the 180 Patent by  
7 such third parties. Defendants' acts of inducement include: providing the 180 Patent  
8 Accused Products or components thereof to third parties and intending them to make,  
9 use, offer to sell, sell, and/or import the 180 Patent Accused Products; advertising the 180  
10 Patent Accused Products in the United States and encourages the sale and offer for sale of  
11 the 180 Patent Accused Products by other entities by listing stores where SanDisk  
12 products, including specifically the Accused Products, can be purchased (for example,  
13 <https://www.sandisk.com/home>; <https://www.sandisk.com/oem-design/mobile/inand>;  
14 <https://www.sandisk.com/about/where-to-buy>; [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/sd-cards/extremepro-sd-uhs-i)  
15 [cards/sd-cards/extremepro-sd-uhs-i](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd);  
16 [https://www.sandisk.com/home/memory-](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)  
17 [cards/microsd-cards/extremeplus-microsd](https://www.sandisk.com/home/memory-cards/microsd-cards/extremeplus-microsd)); encouraging third parties to communicate  
18 directly with Defendants' representatives and providing information about the 180 Patent  
19 Accused Products for purposes of technical assistance, design, replacement, sales, and  
20 marketing of the 180 Patent Accused Products (for example, <http://kb.sandisk.com/> and  
21 links therein; <https://www.sandisk.com/oem-design/mobile/inand>;  
22 <https://pct1.sandisk.com/NewSearch.aspx>; <https://link.sandisk.com/welcome.html>).

22 91. Defendants proceeded in this manner despite knowledge of the 180 Patent  
23 and their knowledge that specific actions they actively induced and continue to actively  
24 induce on the part of third parties constitute infringement of the 180 Patent. The  
25 Defendants had knowledge of the 180 Patent and the infringement of the 180 Patent as  
26 early as described in paragraphs 34-36. At the very least, because Defendants have been  
27 and remain on notice of the 180 Patent and the accused infringement, they have been and  
28

1 remain willfully blind regarding the infringement they have induced and continue to  
2 induce.

3 92. MTL has suffered and continues to suffer damages as a result of  
4 Defendants' infringement of the 180 Patent.

5 93. Defendants' infringement of the 180 Patent has been and continues to be  
6 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
7 knowledge of the 180 Patent and the infringement of the 180 Patent as early as  
8 described in paragraphs 34-36, and have proceeded to infringe the 180 Patent with full  
9 knowledge of that patent and its applicability to SanDisk's products. Defendants'  
10 intentional, knowing, egregious, culpable, willful, wanton, malicious, bad faith,  
11 deliberate, consciously wrongful, and/or flagrant infringement entitles MTL to increased  
12 damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting  
13 this action under 35 U.S.C. § 285.

14 **COUNT VI:**

15 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 7,275,186**

16 94. MTL incorporates and realleges paragraphs 1 - 93 above as if fully set forth  
17 herein.

18 95. On information and belief, Defendants have infringed and continue to  
19 infringe one or more claims of the 186 Patent, including but not limited to Claims 16, 17,  
20 and 19 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by  
21 making, using, offering to sell, selling, and/or importing into the United States without  
22 authority eMMC memory, including eMMC memory within eMCP, compliant with the  
23 JEDEC eMMC 4.41 (JESD84-A441) standard or higher (the "186 Patent Accused  
24 Products"). The 186 Patent Accused Products include, for example and without  
25 limitation, iNAND 7232.

26 96. By way of example, on information and belief, each 186 Patent Accused  
27 Product is a memory unit for use in an electronic device, the electronic device having a  
28

1 host electronic module for processing data and a data bus for operatively connecting the  
2 host module to the memory unit. *See* JEDEC eMMC 4.41 at 163. The memory unit  
3 comprising a receiving mechanism (for example, a card interface controller) for receiving  
4 a first bit pattern from the host module through the data bus (for example, a specific data  
5 pattern or test pattern on each selected data line during the bus testing procedure). *See*  
6 JEDEC eMMC 4.41 at 16, 50, 205. Each memory unit further comprises a conversion  
7 mechanism (for example, a card interface controller), responsive to the received first bit  
8 pattern, for providing a second bit pattern on the data bus (for example, the reversed  
9 pattern sent from the card to the host), wherein the second bit pattern has at least a part of  
10 a complimentary pattern of the received first bit pattern (for example the reversed bit  
11 pattern), and wherein the host electronic module containing each memory unit is adapted  
12 to compare the first bit pattern to the second bit pattern as received in the host module  
13 (for example, an XNOR operation in step 30 of the bus testing procedure), for  
14 determining a usable bus width of the data bus (for example, by masking the result of the  
15 comparison of the XNOR operation in step 30 for either 8, 4, or 1 data lines in step 31 of  
16 the bus testing procedure) based on a predetermined relationship between the first bit  
17 pattern and the complementary pattern of the first bit pattern (for example, the result of  
18 the masking in step 31 of the bus testing procedure should be 0 [step 32]). *Id.* at 16, 50-  
19 51, 204-06.

20 97. Additionally, in each memory unit the received first bit pattern has an  
21 alternate pattern of '0' and '1' and the second bit pattern is complementary to the first bit  
22 pattern. *Id.* at 205.

23 98. Moreover, the data bus for each memory unit has a maximum bus width (for  
24 example, an 8 bit data bus) and the memory unit has a number of data pins (for example,  
25 DAT0-DAT7 = 8 data pins) for operatively connecting to the data bus, and wherein the  
26 number of data pins is equal to the number of data bits conveyable in the maximum bus  
27 width (for example, an 8 bit data bus and 8 data pins). *Id.* at 141, 186.

1           99. On information and belief, Defendants have induced and continue to induce  
2 infringement of one more claims of the 186 Patent, including but not limited to Claims  
3 16, 17, and 19, pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as users,  
4 customers, distributors, wholesalers, retailers, affiliates, parents, subsidiaries, importers,  
5 or sellers to make, use, offer to sell, sell, and/or import into the United States without  
6 authorization the 186 Patent Accused Products. The making, using, offering to sell,  
7 selling, and/or importing into the United States constitutes direct infringement, literally or  
8 under the doctrine of equivalents, of one or more claims of the 186 Patent by such third  
9 parties. Defendants' acts of inducement include: providing the 186 Patent Accused  
10 Products or components thereof to third parties and intending them to make, use, offer to  
11 sell, sell, and/or import the 186 Patent Accused Products; advertising the 186 Patent  
12 Accused Products in the United States and encourages the sale and offer for sale of the  
13 186 Patent Accused Products (for example, [https://www.sandisk.com/oem-](https://www.sandisk.com/oem-design/mobile/inand)  
14 [design/mobile/inand](https://www.sandisk.com/oem-design/mobile/inand)); encouraging third parties to communicate directly with  
15 Defendants' representatives and providing information about the 186 Patent Accused  
16 Products for purposes of technical assistance, design, sales, and marketing of the 186  
17 Patent Accused Products (for example, [https://www.sandisk.com/oem-](https://www.sandisk.com/oem-design/mobile/inand)  
18 [design/mobile/inand](https://www.sandisk.com/oem-design/mobile/inand)).

19           100. Defendants proceeded in this manner despite knowledge of the 186 Patent  
20 and their knowledge that specific actions they actively induced and continue to actively  
21 induce on the part of third parties constitute infringement of the 186 Patent. The  
22 Defendants had knowledge of the 542 Patent and the infringement of the 542 Patent as  
23 early as described in paragraphs 34-36. At the very least, because Defendants have been  
24 and remain on notice of the 186 Patent and the accused infringement, they have been and  
25 remain willfully blind regarding the infringement they have induced and continue to  
26 induce.

27           101. MTL has suffered and continues to suffer damages as a result of Defendants'  
28 infringement of the 186 Patent.



1 102. Defendants' infringement of the 186 Patent has been and continues to be  
2 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
3 knowledge of the 186 Patent and the infringement of the 186 Patent as early as described  
4 in paragraphs 34-36, and have proceeded to infringe the 186 Patent with full knowledge  
5 of that patent and its applicability to SanDisk's products. Defendants' intentional,  
6 knowing, egregious, culpable, willful, wanton, malicious, bad faith, deliberate,  
7 consciously wrongful, and/or flagrant infringement entitles MTL to increased damages  
8 under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action  
9 under 35 U.S.C. § 285.

10 **COUNT VII:**

11 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 7,827,370**

12 103. MTL incorporates and realleges paragraphs 1 - 102 above as if fully set forth  
13 herein.

14 104. On information and belief, Defendants have infringed and continue to  
15 infringe one or more claims of the 370 Patent, including but not limited to Claims 12, 13,  
16 16, 17, 18, and 19 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of  
17 equivalents, by making, using, offering to sell, selling, and/or importing into the United  
18 States without authority eMMC memory, including eMMC memory within eMCP,  
19 compliant with the JEDEC eMMC 4.41 (JESD84-A441) standard or higher (the "370  
20 Patent Accused Products"). The 370 Patent Accused Products include, for example and  
21 without limitation, iNAND 7232.

22 105. By way of example, on information and belief, each 370 Patent Accused  
23 Product is an apparatus comprising an interface controller (for example, a card interface  
24 controller) arranged to write protect at least one part of a memory of said apparatus (for  
25 example, the addressed write-protect group) by a command (for example,  
26 SET\_WRITE\_PROT). *See* JEDEC eMMC 4.41 at 16, 63. On information and belief,  
27 each apparatus further comprises a data register (for example, the Extended CSD  
28

1 Register) arranged to define at least one bit to indicate that permanent write protection of  
2 the at least one part of the memory is allowed (for example, Bit[2] and Bit[4] of the  
3 USER\_WP[171] slice of the Extended CSD Register). *Id.* at 128, 146. Each apparatus  
4 further comprises, on information and belief, a controller (for example, the card interface  
5 controller) arranged to set the at least one bit (for example, Bit[2] and Bit[4] of the  
6 USER\_WP[171] slice of the Extended CSD Register) in order to redefine the command  
7 (for example, SET\_WRITE\_PROT) to allow permanent write protection, that cannot be  
8 un-protected by a command (for example, a permanent clear write protect command), of  
9 the at least one part of the memory of said apparatus (for example, the addressed write-  
10 protect group). *Id.* at 16, 63-64, 146. On information and belief, the controller in each  
11 apparatus (for example, the card interface controller) is further arranged to execute the  
12 command in order to permanently write protect said at least one part of the memory (for  
13 example, CMD28 or SET\_WRITE\_PROT). *Id.* at 16, 89.

14 106. Further, on information and belief, the memory in each apparatus is arranged  
15 to comprise at least one memory group (for example, the size of the write protect group is  
16 set by WP\_GRP\_SIZE [36:32]). *Id.* at 121.

17 107. Further, on information and belief, each apparatus comprises an additional  
18 data register (for example, the CSD\_Register) arranged to control existence and  
19 characteristics of the at least one part of the memory (for example, the write protect group  
20 size WP\_GRP\_SIZE [36:32]). *Id.* at 116, 121.

21 108. Further, the additional data register in each apparatus, on information and  
22 belief, is arranged to define access to the at least one part of the memory (for example,  
23 the write protect group enable WP\_GRP\_ENABLE slice of the CSD Register). *Id.* at 116,  
24 121.

25 109. Further, on information and belief, the memory in each apparatus is arranged  
26 to implement different memory technologies (for example, FLASH and ROM memory).

27 110. Further, on information and belief, the apparatus is a multimedia card  
28 (MMC).

1           111. On information and belief, Defendants have induced and continue to induce  
2 infringement of one more claims of the 370 Patent, including but not limited to Claims  
3 12, 13, 16, 17, 18, and 19, pursuant to 35 U.S.C. § 271(b) by encouraging third parties  
4 such as users, customers, distributors, wholesalers, retailers, affiliates, parents,  
5 subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or import into the  
6 United States without authorization the 370 Patent Accused Products. The making, using,  
7 offering to sell, selling, and/or importing into the United States constitutes direct  
8 infringement, literally or under the doctrine of equivalents, of one or more claims of the  
9 370 Patent by such third parties. Defendants' acts of inducement include: providing the  
10 370 Patent Accused Products or components thereof to third parties and intending them  
11 to make, use, offer to sell, sell, and/or import the 370 Patent Accused Products;  
12 advertising the 370 Patent Accused Products in the United States and encourages the sale  
13 and offer for sale of the 370 Patent Accused Products (for example,  
14 <https://www.sandisk.com/oem-design/mobile/inand>); encouraging third parties to  
15 communicate directly with Defendants' representatives and providing information about  
16 the 370 Patent Accused Products for purposes of technical assistance, design, sales, and  
17 marketing of the 370 Patent Accused Products (for example,  
18 <https://www.sandisk.com/oem-design/mobile/inand>).

19           112. Defendants proceeded in this manner despite knowledge of the 370 Patent  
20 and their knowledge that specific actions they actively induced and continue to actively  
21 induce on the part of third parties constitute infringement of the 370 Patent. The  
22 Defendants had knowledge of the 370 Patent and the infringement of the 370 Patent as  
23 early as described in paragraphs 34-36. At the very least, because Defendants have been  
24 and remain on notice of the 370 Patent and the accused infringement, they have been and  
25 remain willfully blind regarding the infringement they have induced and continue to  
26 induce.

27           113. MTL has suffered and continues to suffer damages as a result of Defendants'  
28 infringement of the 370 Patent.

1 114. Defendants' infringement of the 370 Patent has been and continues to be  
2 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
3 knowledge of the 370 Patent and the infringement of the 370 Patent as early as described  
4 in paragraphs 34-36, and have proceeded to infringe the 370 Patent with full knowledge  
5 of that patent and its applicability to SanDisk's products. Defendants' intentional,  
6 knowing, egregious, culpable, willful, wanton, malicious, bad faith, deliberate,  
7 consciously wrongful, and/or flagrant infringement entitles MTL to increased damages  
8 under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action  
9 under 35 U.S.C. § 285.

10 **COUNT VIII:**

11 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 7,739,487**

12 115. MTL incorporates and realleges paragraphs 1 - 114 above as if fully set forth  
13 herein.

14 116. On information and belief, Defendants have infringed and continue to  
15 infringe one or more claims of the 487 Patent, including but not limited to Claims 20 and  
16 21, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by  
17 making, using, offering to sell, selling, and/or importing into the United States without  
18 authority eMMC memory, including eMMC memory within eMCP, compliant with the  
19 JEDEC eMMC 4.41 (JESD84-A441) standard or higher (the "487 Patent Accused  
20 Products"). The 487 Patent Accused Products include, for example and without  
21 limitation, iNAND 7232.

22 117. By way of example, on information and belief, each 487 Patent Accused  
23 Product is a peripheral device having an MMC/SD-interface (for example, an MMC-  
24 interface) configured for booting (for example, the boot operation mode) a bootable host  
25 device configured for being booted from a peripheral device having an MMC/SD  
26 interface. *See* JEDEC eMMC 4.41 at 34. Each peripheral device, on information and  
27 belief, further comprises an MMC/SD-interface (for example, an MMC-interface),  
28

1 provided with power terminal (for example, Vcc and Vccq pins), a data bus with data bus  
2 terminals (for example, the DAT0-DAT7 pins), a clock line with a clock terminal (for  
3 example, the CLK pin), and a command line with command terminal (for example, the  
4 CMD pin). *Id.* at 15-16. On information and belief, each peripheral device further  
5 comprises a peripheral device controller (for example, a card interface controller),  
6 connected to said MMC/SD-interface. *Id.* at 16. Each peripheral device further  
7 comprises, on information and belief, a memory module (for example, the memory core),  
8 connected to said peripheral device controller, and wherein said peripheral device  
9 controller is configured for sending the first data (for example, first boot data) of a  
10 predefined storage area (for example, a boot area or user area) via a data bus, starting with  
11 a start bit of the first data frame (for example, start bit “S”), when receiving power at the  
12 terminal of said MMC/SD-interface of said peripheral device, and a low signal at the  
13 command terminal of said MMC/SD-interface during power-up (for example, holding the  
14 command line for at least 74 cycles during power up). *Id.* at 16, 35-37, 108, 165.

15 118. Further, on information and belief, each peripheral device controller is  
16 further configured to send said first data of a predefined storage area via data bus, only  
17 when receiving a low signal at said command terminal of said MMC/SD-interface before  
18 or during power-up during the transmission of between 24 to 148, preferably between 60  
19 and 100 and most preferably to 74 initialization clock signals. *Id.* at 36, 38, 165.

20 119. On information and belief, Defendants have induced and continue to induce  
21 infringement of one more claims of the 487 Patent, including but not limited to Claim 20  
22 and 21, pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as users,  
23 customers, distributors, wholesalers, retailers, affiliates, parents, subsidiaries, importers,  
24 or sellers to make, use, offer to sell, sell, and/or import into the United States without  
25 authorization the 487 Patent Accused Products. The making, using, offering to sell,  
26 selling, and/or importing into the United States constitutes direct infringement, literally or  
27 under the doctrine of equivalents, of one or more claims of the 487 Patent by such third  
28 parties. Defendants’ acts of inducement include: providing the 487 Patent Accused

1 Products or components thereof to third parties and intending them to make, use, offer to  
2 sell, sell, and/or import the 487 Patent Accused Products; advertising the 487 Patent  
3 Accused Products in the United States and encourages the sale and offer for sale of the  
4 487 Patent Accused Products (for example, [https://www.sandisk.com/oem-](https://www.sandisk.com/oem-design/mobile/inand)  
5 [design/mobile/inand](https://www.sandisk.com/oem-design/mobile/inand)); encouraging third parties to communicate directly with  
6 Defendants' representatives and providing information about the 487 Patent Accused  
7 Products for purposes of technical assistance, design, sales, and marketing of the 370  
8 Patent Accused Products (for example, [https://www.sandisk.com/oem-](https://www.sandisk.com/oem-design/mobile/inand)  
9 [design/mobile/inand](https://www.sandisk.com/oem-design/mobile/inand)).

10 120. Defendants proceeded in this manner despite knowledge of the 487 Patent  
11 and their knowledge that specific actions they actively induced and continue to actively  
12 induce on the part of third parties constitute infringement of the 487 Patent. The  
13 Defendants had knowledge of the 487 Patent and the infringement of the 487 Patent as  
14 early as described in paragraphs 34-36. At the very least, because Defendants have been  
15 and remain on notice of the 487 Patent and the accused infringement, they have been and  
16 remain willfully blind regarding the infringement they have induced and continue to  
17 induce.

18 121. MTL has suffered and continues to suffer damages as a result of  
19 Defendants' infringement of the 487 Patent.

20 122. Defendants' infringement of the 487 Patent has been and continues to be  
21 willful, deliberate, and in disregard of MTL's patent rights. The Defendants had  
22 knowledge of the 542 Patent and the infringement of the 487 Patent as early as described  
23 in paragraphs 34-36, and have proceeded to infringe the 487 Patent with full knowledge  
24 of that patent and its applicability to SanDisk's products. Defendants' intentional,  
25 knowing, egregious, culpable, willful, wanton, malicious, bad faith, deliberate,  
26 consciously wrongful, and/or flagrant infringement entitles MTL to increased damages  
27 under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action  
28 under 35 U.S.C. § 285.

**PRAYER FOR RELIEF**

MTL respectfully prays for relief as follows:

- (a) a judgment that Defendants have infringed and continue to infringe one or more claims of the Asserted Patents;
- (b) a judgment that Defendants have induced infringement and continue to induce infringement of one or more claims of the Asserted Patents;
- (c) a judgment that Defendants have willfully infringed one or more claims of the Asserted Patents;
- (d) a judgment awarding MTL all damages adequate to compensate for Defendants' infringement, and in no event less than a reasonable royalty for Defendants' infringement, including all pre-judgment and post-judgment interest at the maximum rate allowed by law;
- (e) a judgment awarding MTL treble damages pursuant to 35 U.S.C. § 284 as a result of Defendants' willful conduct;
- (f) a judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding MTL its reasonable attorneys fees; and
- (g) a judgment awarding MTL such other relief as the Court may deem just and equitable.

**DEMAND FOR JURY TRIAL**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff MTL demands a trial by jury of this action.

Dated: December 6, 2016

/s/ Matthew D. Powers

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