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14 **MEMORY TECHNOLOGIES, LLC**

15 **UNITED STATES DISTRICT COURT**

16 **CENTRAL DISTRICT OF CALIFORNIA**

17
18 MEMORY TECHNOLOGIES,
19 LLC, a Nevada company,

20 Plaintiff,

21 vs.

22 KINGSTON TECHNOLOGY
23 CORPORATION, a California
24 corporation, KINGSTON
25 TECHNOLOGY COMPANY,
26 INC., a Delaware corporation,

27 Defendants.

CASE No. 8:18-cv-00171

**COMPLAINT FOR PATENT
INFRINGEMENT;**

DEMAND FOR JURY TRIAL

26 Plaintiff Memory Technologies, LLC (“MTL”) hereby alleges for its
27 Complaint for patent infringement against Kingston Technology Corporation and
28 Kingston Technology Company, Inc. (collectively “Defendants”) on personal

1 knowledge as to its own actions and on information and belief as to the actions of
2 others, as follows:

3 **I. JURISDICTION AND VENUE**

4 1. This civil action for patent infringement arises under the patent laws
5 of the United States, 35 U.S.C. § 100 *et seq.*, including pursuant to 35 U.S.C. §
6 271. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and
7 1338(a).

8 2. This Court has personal jurisdiction over Defendants. On information
9 and belief, Defendants have systematic and continuous contacts with this forum at
10 least because they conduct substantial business in, and are headquartered in,
11 California and in this District at 17600 Newhope Street, Fountain Valley,
12 California 92708.

13 3. Venue is proper in the Central District of California under 28 U.S.C.
14 §§ 1391 and 1400(b). Venue is proper with respect to Defendant Kingston
15 Technology Company, Inc. because it has committed acts of infringement in this
16 District and has a regular and established place of business in this District at 17600
17 Newhope Street, Fountain Valley, California 92708. Venue is proper as to
18 Kingston Technology Corporation because it resides in this District through its
19 incorporation in the State of California, and because it has committed acts of
20 infringement in this District and has a regular and established place of business in
21 this district at 17600 Newhope Street, Fountain Valley, California 92708.

22 4. On information and belief, Defendants conduct substantial business
23 in this District. Defendants make, use, sell, offer to sell, and/or import, within this
24 District, systems and components that infringe one or more of the Asserted Patents
25 (defined below), and induce infringement by others within this District. Defendants
26 derive substantial revenue from the sale of infringing systems and components
27 within the District, and/or expect or should reasonably expect their actions to have
28 consequences within the District. Defendants have committed and continue to

1 commit acts of patent infringement in this District, including making, using,
2 selling, offering to sell, and/or importing infringing systems, products, and
3 components within the District, and inducing infringement by others in this
4 District.

5 5. Moreover, on information and belief, Defendants are headquartered
6 at 17600 Newhope Street, Fountain Valley, California 92708. Defendants have
7 established a significant presence in this District by manufacturing, using, selling,
8 offering to sell, and importing Kingston SD cards (including Kingston microSD
9 cards), Kingston eMMC memory, and/or products containing Kingston eMMC
10 memory that infringe one or more Asserted Patents, or inducing such acts.

11 6. Additionally, on information and belief, according to publicly
12 available documentation, Defendants' principal marketing, sales, and customer
13 service decisions are made at Defendants' headquarters within this District.
14 Furthermore, Defendants' finance and accounting departments, as well as its legal
15 and executive offices are located at its headquarters within this District.

16 7. Additionally, on information and belief, Defendants induce others,
17 including third-parties, to infringe the Asserted Patents within this District,
18 through, among other of its operations, its marketing, sales, and customer service
19 operations.

20 **II. PARTIES**

21 8. MTL is organized in Nevada and has its headquarters at 2300 Carillon
22 Point, Kirkland, WA 98033. MTL is a subsidiary of Pendrell Corporation. MTL
23 owns a worldwide patent portfolio that covers numerous memory technologies. As
24 many as 82 of MTL's patents belong to patent families containing patents essential
25 to various memory and electronic storage standards, including the JEDEC eMMC
26
27
28

1 standard¹ and the SD Standard². In the past four years, MTL has licensed the
2 Asserted Patents (defined below) to most of the major flash memory manufacturers
3 in the world.

4 9. On information and belief, Kingston Technology Company, Inc. is
5 organized under the laws of the state of Delaware, with its principal place of
6 business at 17600 Newhope Street, Fountain Valley, California 92708.

7 10. On information and belief, Kingston Technology Corporation is
8 incorporated under the laws of the State of California, with its principal place of
9 business at 17600 Newhope Street, Fountain Valley, California 92708.

10 11. On information and belief, Defendants are in the business of
11 designing, developing, manufacturing, making, offering for sale, selling, using,
12 selling in the United States after importation, selling for importation, and/or
13 importing into the United States certain flash memory devices or their components,
14 including certain SD Cards and eMMC memory.

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

20 13. MTL is the owner of the patents at issue in this action: U.S. Patent
21 Nos. RE45,486 ("the RE486 Patent"); RE45,542 ("the RE542 Patent"); 7,565,469
22 ("the 469 Patent"); 7,827,370 ("the 370 Patent"); 7,739,487 ("the 487 Patent");
23 8,307,180 ("the 180 Patent"); 9,063,850 ("the 850 Patent"); and 9,367,486 ("the
24 486 Patent") (collectively, the "Asserted Patents").

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

² The SD Standard refers to the Secure Digital Association Physical Layer Specification ("SD
Standard").

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

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

9 **III. THE ASSERTED PATENTS**

10 16. On April 21, 2015, the United States Patent and Trademark Office
11 duly and legally issued U.S. Patent No. RE45,486 ("the RE486 Patent"), entitled
12 "Method for Addressing a Memory Card, a System Using a Memory Card, and a
13 Memory Card." A copy of the RE486 Patent is attached hereto as Exhibit 1.

14 17. MTL owns all substantial right, title, and interest in the RE486 Patent,
15 and holds the right to sue and recover damages for infringement thereof, including
16 past infringement.

17 18. On June 2, 2015, the United States Patent and Trademark Office duly
18 and legally issued U.S. Patent No. RE45,542 ("the RE542 Patent"), entitled
19 "Method and a System for Determining the Power Consumption in Connection
20 with an Electronic Device, and an Electronic Device." A copy of the RE542 Patent
21 is attached hereto as Exhibit 2.

22 19. MTL owns all substantial right, title, and interest in the RE542 Patent,
23 and holds the right to sue and recover damages for infringement thereof, including
24 past infringement.

25 20. On July 21, 2009, the United States Patent and Trademark Office duly
26 and legally issued U.S. Patent No. 7,565,469 ("the 469 Patent"), entitled
27 "Multimedia Card Interface Method, Computer Program Product and Apparatus."
28 A copy of the 469 Patent is attached hereto as Exhibit 3.

1 21. MTL owns all substantial right, title, and interest in the 469 Patent,
2 and holds the right to sue and recover damages for infringement thereof, including
3 past infringement.

4 22. On June 15, 2010, the United States Patent and Trademark Office duly
5 and legally issued U.S. Patent No. 7,739,487 (“the 487 Patent”), entitled “Method
6 for Booting a Host Device From an MMC/SD Device, a Host Device Bootable
7 from an MMC/SD Device and an MMC/SD Device Method a Host Device May
8 Booted From.” A copy of the 487 Patent is attached hereto as Exhibit 4.

9 23. MTL owns all substantial right, title, and interest in the 487 Patent,
10 and holds the right to sue and recover damages for infringement thereof, including
11 past infringement.

12 24. On November 2, 2010, the United States Patent and Trademark Office
13 duly and legally issued U.S. Patent No. 7,827,370 (“the 370 Patent”), entitled
14 “Partial Permanent Write Protection of a Memory Card and Partially Permanently
15 Write Protected Memory Card.” A copy of the 370 Patent is attached hereto as
16 Exhibit 5.

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

20 26. On November 6, 2012, the United States Patent and Trademark Office
21 duly and legally issued U.S. Patent No. 8,307,180 (“the 180 Patent”), entitled
22 “Extended Utilization Area for a Memory Device.” A copy of the 180 Patent is
23 attached hereto as Exhibit 6.

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

27 28. On June 23, 2015, the United States Patent and Trademark Office duly
28 and legally issued U.S. Patent No. 9,063,850 (“the 850 Patent”), entitled “Extended

1 Utilization Area for a Memory Device.” A copy of the 850 Patent is attached hereto
2 as Exhibit 7.

3 29. MTL owns all substantial right, title, and interest in the 850 Patent,
4 and holds the right to sue and recover damages for infringement thereof, including
5 past infringement.

6 30. On June 14, 2016, the United States Patent and Trademark Office duly
7 and legally issued U.S. Patent No. 9,367,486 (“the 486 Patent”), entitled “Extended
8 Utilization Area for a Memory Device.” A copy of the 486 Patent is attached hereto
9 as Exhibit 8.

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

13 32. No later than October 23, 2013, Defendants were on notice of the
14 Asserted Patents and their infringement of the Asserted Patents. On October 23,
15 2013, MTL contacted John Tu, CEO of Kingston Technology Company, Inc.
16 regarding licensing the Asserted Patents to Defendants. MTL thereafter wrote to
17 Kingston on January 30, 2014, March 25, 2014, July 10, 2014, June 23, 2015,
18 August 25, 2015, June 20, 2016, August 16, 2017, September 1, 2017, September
19 14, 2017, and October 2, 2017 in pursuit of a license agreement.

20 33. During the period between October 23, 2013 and August 16, 2017,
21 MTL met or spoke with Defendants’ representatives on multiple occasions to
22 inform Defendants’ that MTL is the owner of a patent portfolio relating to flash
23 memory technologies that are widely implemented under the eMMC and SD
24 Standards, including the Asserted Patents, and that in many instances MTL’s
25 patents are essential to the eMMC and SD Standards.

26 34. MTL has informed Defendants, on numerous occasions between
27 October 23, 2013 and August 16, 2017, that Defendants are required to have a
28 license to the Asserted Patents for any of Defendants’ products that comply with

1 the eMMC or SD Standards.

2 35. MTL has offered, on numerous occasions between October 23, 2013
3 and August 16, 2017, a license to the Asserted Patents under reasonable and non-
4 discriminatory (“RAND”) terms.

5 36. Despite MTL’s numerous attempts to engage Defendants, Defendants
6 have not responded to repeated attempts to discuss licensing of the Asserted
7 Patents.

8 37. Defendants have been on notice at least as early as October 23, 2013
9 that its actions constituted and continue to constitute infringement of one or more
10 claims of the Asserted Patents.

11 **IV. FIRST CLAIM FOR RELIEF**

12 **DEFENDANTS’ INFRINGEMENT OF U.S. PATENT NO. RE45,486**

13 38. MTL incorporates and realleges paragraphs 1 - 37 above as if fully
14 set forth herein.

15 39. On information and belief, Defendants have infringed and continue to
16 infringe one or more claims of the RE486 Patent, including but not limited to
17 Claims 6, 9-11, 22, 23, 26, and 27 pursuant to 35 U.S.C. § 271(a), literally or under
18 the doctrine of equivalents, by making, using, offering to sell, selling, and/or
19 importing into the United States without authority High Capacity (HC) and
20 Extended Capacity (XC) SD Cards compliant with SD Specification Version 2.00
21 or higher, as well as eMMC memory that is compliant with the JEDEC eMMC
22 4.41 (JESD84-A441) standard or higher (these SD Cards and eMMC memory
23 devices are, collectively, the “RE486 Patent Accused Products”). The RE486
24 Patent Accused Products include, for example and without limitation, Kingston
25 eMMC™ products (EMMC04G-M627, EMMC08G-M325, EMMC16G-M525,
26 EMMC32G-M525, EMMC64G-M525, EMMC04G-S627, EMMC04G-W627,
27 EMMC08G-W325, EMMC16G-W525, EMMC32G-W525, EMMC64G-W525),
28 Kingston SDHC/SDXC Class 10 UHS-I Cards (SD10VG2/16GB,

1 SD10VG2/32GB, SD10VG2/64GB, SD10VG2/128GB), Kingston SDHC/SDXC
2 Class 10 UHS-I Cards (SDA10/16GB, SDA10/32GB, SDA10/64GB
3 SDA10/128GB, SDA10/256GB, SDA10/512GB), Kingston SDHC/SDXC UHS-I
4 U3 Cards (SDA3/32GB, SDA3/64GB, SDA3/128GB, SDA3/256GB), Kingston
5 microSDHC Class 4 Cards (SDC4/8GBSP, SDC4/16GBSP, SDC4/32GBSP),
6 Kingston microSDHC/microSDXC Class 10 UHS-I Cards (SDC10G2/16GBSP,
7 SDC10G2/32GBSP, SDC10G2/64GBSP, SDC10G2/128GBSP), Kingston Gold
8 microSD UHS-I Speed Class 3 (U3) Cards (SDCG/16GBSP, SDCG/32GBSP,
9 SDCG/64GBSP), Kingston Industrial Temperature microSD UHS-I Cards
10 (SDCIT/8GBSP, SDCIT/16GBSP, SDCIT/32GBSP), and Kingston
11 microSDHC/SDXC UHS-I U3 90R/80W Cards (SDCA3/32GBSP,
12 SDCA3/64GBSP, SDCA3/128GBSP).

13 40. By way of example, on information and belief, each SD Card that is
14 a RE486 Patent Accused Product is a memory card comprising several memory
15 locations for storing data (for example, physical areas on the memory to store one
16 byte), the memory card stores at least one parameter (for example, the C_SIZE
17 parameter is stored in the CSD register), and the memory card is configured so that
18 the number of memory locations of the memory card can be calculated on the basis
19 of the at least one parameter (for example, memory capacity = (C_SIZE + 1) *
20 512K byte). *See* SD Specifications, Part 1, Physical Layer Simplified
21 Specification, Version 2.00 (Sep. 25, 2006), available at
22 http://users.ece.utexas.edu/~valvano/EE345M/SD_Physical_Layer_Spec.pdf at
23 73, 86-87 (“SD Specification 2.00”). On information and belief, each memory card
24 is configured so that a specific number of bits is reserved for said at least one
25 parameter (for example, 22 bits are reserved in the CSD Register for the C_SIZE
26 parameter) and is configured to have stored therein an addressing data (for
27 example, the value of Bit 30 of the OCR register) that is indicative of at least one
28 addressing method supported (for example, block address format or byte address

1 format). *Id.* at 41, 74. On information and belief, the addressing data indicates
2 either a basic addressing method (for example, if Bit 30 is 0, the memory card is a
3 Standard Capacity SD Memory Card and uses byte address format) or an expanded
4 addressing method (for example, if Bit 30 is 1, the memory card is High Capacity
5 SD Memory Card and uses block address format), and the expanded addressing
6 method enables the addressing of data in a larger number of memory locations than
7 the basic addressing method (for example, in block address format in High
8 Capacity SD Memory Cards the data is addressed in block units of 512 bytes and
9 in byte address format in Standard Capacity SD Memory Cards the data is
10 addressed in byte units). *Id.* at 41, 50-51, 74.

11 41. Moreover, on information and belief, each SD Card that is a RE486
12 Patent Accused Product is a memory card wherein data is arranged to be stored
13 and read in the memory card block-by-block (for example, single or multiple block
14 read or write). *Id.* at 18-20.

15 42. Additionally, on information and belief, each SD Card that is a RE486
16 Patent Accused Product is a memory card wherein the memory locations of one
17 block are arranged to be addressed with one address (for example, block address
18 format). *Id.* at 41.

19 43. On information and belief, each SD Card that is a RE486 Patent
20 Accused Product is a memory card wherein the basic addressing method supports
21 addressing only one memory location with one address (for example, byte address
22 format). *Id.* at 41.

23 44. Moreover, on information and belief, each SD Card that is a RE486
24 Patent Accused Product is a memory card wherein the expanded addressing
25 method supports a higher memory capacity than the basic addressing method (for
26 example, High Capacity compared to Standard Capacity SD Cards). *Id.* at 41.

27 45. Additionally, on information and belief, each SD Card that is a RE486
28 Patent Accused Product is a memory card that further comprises a register for

1 storing the addressing data (for example, the OCR Register). *Id.* at 74.

2 46. On information and belief, each SD Card that is a RE486 Patent
3 Accused Product is a memory card wherein the stored addressing data comprises
4 one bit (for example, Bit 30 of the OCR Register). *Id.*

5 47. As another example, on information and belief, each eMMC memory
6 device that is a RE486 Patent Accused Product is a memory card comprising
7 several memory locations for storing data (for example, physical areas on the
8 memory to store one byte), the memory card stores at least one parameter (for
9 example, the SEC_COUNT parameter is stored in the Extended CSD register), and
10 the memory card is configured so that the number of memory locations of the
11 memory card can be calculated on the basis of the at least one parameter (for
12 example, device density = (SEC_COUNT) x 512B). *See* JEDEC eMMC 4.41 at
13 24, 113, 126, 136. On information and belief, each memory card is configured so
14 that a specific number of bits is reserved for said at least one parameter (for
15 example, bytes [215:212] of the Extended CSD Register are reserved for the
16 SEC_COUNT parameter) and is configured to have stored therein an addressing
17 data (for example, the OCR register bits [30:29] store values indicate the Access
18 Mode) that is indicative of at least one addressing method supported (for example,
19 byte mode or sector mode). *Id.* at 44, 113, 126. On information and belief, the
20 addressing data indicates either a basic addressing method (for example, 00b
21 indicates byte access mode) or an expanded addressing method (10b indicates
22 sector access mode), and the expanded addressing method enables the addressing
23 of data in a larger number of memory locations than the basic addressing method
24 (for example, in sector access mode the addressable unit is 512 bytes and in byte
25 access mode the addressable unit is one byte). *Id.* at 14, 44, 113, 119, 126.

26 48. Moreover, on information and belief, each eMMC memory device
27 that is a RE486 Patent Accused Product is a memory card that complies with the
28 MultiMediaCard specifications. *See generally id.*

1 49. On information and belief, Defendants have induced and continue to
2 induce infringement of one more claims of the RE486 Patent, including but not
3 limited to Claim 6, 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
6 the United States without authorization the RE486 Patent Accused Products. The
7 making, using, offering to sell, selling, and/or importing into the United States
8 constitutes direct infringement, literally or under the doctrine of equivalents, of one
9 or more claims of the RE486 Patent by such third parties. Defendants' acts of
10 inducement include: providing the RE486 Patent Accused Products or components
11 thereof to third parties and intending them to make, use, offer to sell, sell, and/or
12 import the RE486 Patent Accused Products; advertising the RE486 Patent Accused
13 Products in the United States and encouraging the sale and offer for sale of the
14 RE486 Patent Accused Products by other entities by listing stores where Kingston
15 products, including specifically the RE486 Patent Accused Products, can be
16 purchased (for example, <https://www.kingston.com/us/wheretobuy>) and
17 encouraging third parties to communicate directly with Defendants'
18 representatives and providing information about the RE486 Patent Accused
19 Products for purposes of technical assistance, design, replacement, sales, and
20 marketing of the RE486 Patent Accused Products (for example,
21 <https://www.kingston.com/us/support>).

22 50. Defendants proceeded in this manner despite knowledge of the
23 RE486 Patent and their knowledge that specific actions they actively induced and
24 continue to actively induce on the part of third parties constitute infringement of
25 the RE486 Patent. The Defendants had knowledge of the RE486 Patent and the
26 infringement of the RE486 Patent no later than as described in paragraphs 32-37.
27 At the very least, because Defendants have been and remain on notice of the RE486
28 Patent and the accused infringement, they have been and remain willfully blind

1 regarding the infringement they have induced and continue to induce.

2 51. MTL has suffered and continues to suffer damages as a result of
3 Defendants' infringement of the RE486 Patent.

4 52. Defendants' infringement of the RE486 Patent has been and continues
5 to be willful, deliberate, and in disregard of MTL's patent rights. The Defendants
6 had knowledge of the RE486 Patent and the infringement of the RE486 Patent no
7 later than as described in paragraphs 32-37 and have proceeded to infringe the
8 RE486 Patent with full knowledge of that patent and its applicability to
9 Defendants' products. Defendants' intentional, knowing, egregious, culpable,
10 willful, wanton, malicious, bad faith, deliberate, consciously wrongful, and/or
11 flagrant infringement entitles MTL to increased damages under 35 U.S.C. § 284
12 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C.
13 § 285.

14 V. SECOND CLAIM FOR RELIEF

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

16 53. MTL incorporates and realleges paragraphs 1 - 52 above as if fully
17 set forth herein.

18 54. On information and belief, Defendants have infringed and continue to
19 infringe one or more claims of the RE542 Patent, including but not limited to
20 Claims 28 and 38, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of
21 equivalents, by making, using, offering to sell, selling, and/or importing into the
22 United States without authority SD Cards compliant with SD Specification Version
23 3.00 or higher with maximum current consumption greater than 200 mA, as well
24 as Embedded Multimedia Card ("eMMC") memory, including eMMC memory
25 compliant with the JEDEC eMMC 4.41 (JESD84-A441) standard or higher (these
26 SD Cards and eMMC memory are, collectively, the "RE542 Patent Accused
27 Products"). The RE542 Patent Accused Products include, for example and without
28 limitation, Kingston eMMC™ products (EMMC04G-M627, EMMC08G-M325,

1 EMMC16G-M525, EMMC32G-M525, EMMC64G-M525, EMMC04G-S627,
2 EMMC04G-W627, EMMC08G-W325, EMMC16G-W525, EMMC32G-W525,
3 EMMC64G-W525), Kingston SDHC/SDXC Class 10 UHS-I Cards
4 (SD10VG2/16GB, SD10VG2/32GB, SD10VG2/64GB, SD10VG2/128GB),
5 Kingston SDHC/SDXC Class 10 UHS-I Cards (SDA10/16GB, SDA10/32GB,
6 SDA10/64GB SDA10/128GB, SDA10/256GB, SDA10/512GB), Kingston
7 SDHC/SDXC UHS-I U3 Cards (SDA3/32GB, SDA3/64GB, SDA3/128GB,
8 SDA3/256GB), Kingston microSDHC Class 4 Cards (SDC4/8GBSP,
9 SDC4/16GBSP, SDC4/32GBSP), Kingston microSDHC/microSDXC Class 10
10 UHS-I Cards (SDC10G2/16GBSP, SDC10G2/32GBSP, SDC10G2/64GBSP,
11 SDC10G2/128GBSP), Kingston Gold microSD UHS-I Speed Class 3 (U3) Cards
12 (SDCG/16GBSP, SDCG/32GBSP, SDCG/64GBSP), Kingston Industrial
13 Temperature microSD UHS-I Cards (SDCIT/8GBSP, SDCIT/16GBSP,
14 SDCIT/32GBSP), Kingston microSDHC/SDXC UHS-I U3 90R/80W Cards
15 (SDCA3/32GBSP, SDCA3/64GBSP, SDCA3/128GBSP).

16 55. By way of example, on information and belief, each SD Card that is
17 a RE542 Patent Accused Product is a peripheral device comprising a memory
18 storing a default value for power consumption (for example, 200mA) and a
19 limiting value for power consumption (for example, 400mA, 600mA, and 800mA)
20 of the peripheral device, and a connector configured to connect the peripheral
21 device to an electronic device for supplying power to the peripheral device (for
22 example, the power lines VSS1, VDD, VSS2 of the SD card interface). *See* SD
23 Specifications, Part 1, Physical Layer Specification, Version 3.00 (April 16, 2009)
24 (“SD Specification 3.00”). On information and belief, the maximum power
25 consumption of the peripheral device is set at a startup stage to the default value
26 (for example, power consumption is set to 200mA after initialization), and the
27 limiting value, which is higher than the default value, is defined for the power
28 consumption of the peripheral device (for example, 400mA, 600mA, and 800mA).

1 *Id.* at 51. On information and belief, each peripheral device also comprises a
2 processor (for example, a controller) operable to set the maximum power
3 consumption of the peripheral device to a value in the range from the default value
4 to the limiting value-including the default and limiting value (for example, 200mA
5 to 800mA). *Id.* at 15, 51. On information and belief, each peripheral device is
6 configured to receive information from the electronic device for setting the
7 maximum power consumption of the peripheral device (for example, Switch
8 Function Command, CMD6, defines the current limit), and the processor operable
9 to set the maximum power consumption is configured to obtain the value-as
10 indicated by the received information-and to set the maximum power consumption
11 of the peripheral device to the value (for example, a switch in power consumption
12 occurs within 8 clocks after the end bit of status data). *Id.* at 48, 51, 60, 78.

13 56. As another example, on information and belief, each eMMC memory
14 device that is a RE542 Patent Accused Product is a peripheral device comprising
15 a memory storing a default value for power consumption (for example, 200 mA
16 max peak current) and a limiting value for power consumption (for example, max
17 peak currents of 220 mA to 550 mA) of the peripheral device, and a connector
18 configured to connect the peripheral device to an electronic device for supplying
19 power to the peripheral device (for example, the power supply connector pins VCC
20 and VCCQ on the eMMC interface). *See* JEDEC Embedded MultiMediaCard
21 (e.MMC) e.MMC/Card Product Standard, (MMCA, 4.41), JESD84-A441 (March
22 2010) at 15, 50, 127, 138 (“JEDEC eMMC 4.41”). On information and belief, the
23 maximum power consumption of the peripheral device is set at a startup stage to
24 the default value (for example, power consumption is set to 200 mA max peak
25 current after power-on or a software reset), and the limiting value, which is higher
26 than the default value, is defined for the power consumption of the peripheral
27 device (for example, max peak currents of 220 mA up to 550 mA). *Id.* at 50, 138.
28 On information and belief, each peripheral device also comprises a processor (for

1 example, a card interface controller) operable to set the maximum power
2 consumption of the peripheral device to a value in the range from the default value
3 to the limiting value-including the default and limiting value (for example, 200 mA
4 to 550 mA max peak currents). *Id.* at 16, 138, 141. On information and belief, each
5 peripheral device is configured to receive information from the electronic device
6 for setting the maximum power consumption of the peripheral device (for example,
7 SWITCH Command, CMD6), and the processor operable to set the maximum
8 power consumption is configured to obtain the value-as indicated by the received
9 information-and to set the maximum power consumption of the peripheral device
10 to the value (for example, a SWITCH command changes the power class by
11 changing registers). *Id.* at 50, 87, 138, 141.

12 57. On information and belief, Defendants have induced and continue to
13 induce infringement of one more claims of the RE542 Patent, including but not
14 limited to Claims 28 and 38, pursuant to 35 U.S.C. § 271(b) by encouraging third
15 parties such as users, customers, distributors, wholesalers, retailers, affiliates,
16 parents, subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or
17 import into the United States without authorization the RE542 Patent Accused
18 Products. The making, using, offering to sell, selling, and/or importing into the
19 United States constitutes direct infringement, literally or under the doctrine of
20 equivalents, of one or more claims of the RE542 Patent by such third parties.
21 Defendants' acts of inducement include: providing the RE542 Patent Accused
22 Products or components thereof to third parties and intending them to make, use,
23 offer to sell, sell, and/or import the RE542 Patent Accused Products; advertising
24 the RE542 Patent Accused Products in the United States and encouraging the sale
25 and offer for sale of the RE542 Patent Accused Products by other entities by listing
26 stores where Kingston products, including specifically the RE542 Patent Accused
27 Products, can be purchased (for example,
28 <https://www.kingston.com/us/wheretobuy>); and encouraging third parties to

1 communicate directly with Defendants' representatives and providing information
2 about the RE542 Patent Accused Products for purposes of technical assistance,
3 design, replacement, sales, and marketing of the RE542 Patent Accused Products
4 (for example, <https://www.kingston.com/us/support>).

5 58. Defendants proceeded in this manner despite knowledge of the
6 RE542 Patent and their knowledge that specific actions they actively induced and
7 continue to actively induce on the part of third parties constitute infringement of
8 the RE542 Patent. The Defendants had knowledge of the RE542 Patent and the
9 infringement of the RE542 Patent no later than as described in paragraphs 32-37.
10 At the very least, because Defendants have been and remain on notice of the RE542
11 Patent and the accused infringement, they have been and remain willfully blind
12 regarding the infringement they have induced and continue to induce.

13 59. MTL has suffered and continues to suffer damages as a result of
14 Defendants' infringement of the RE542 Patent.

15 60. Defendants' infringement of the RE542 Patent has been and continues
16 to be willful, deliberate, and in disregard of MTL's patent rights. The Defendants
17 had knowledge of the RE542 Patent and the infringement of the RE542 Patent no
18 later than as described in paragraphs 32-37, and have proceeded to infringe the
19 RE542 Patent with full knowledge of that patent and its applicability to Kingston's
20 products. Defendants' intentional, knowing, egregious, culpable, willful, wanton,
21 malicious, bad faith, deliberate, consciously wrongful, and/or flagrant
22 infringement entitles MTL to increased damages under 35 U.S.C. § 284 and to
23 attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

24 VI. THIRD CLAIM FOR RELIEF

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

26 61. MTL incorporates and realleges paragraphs 1 - 60 above as if fully
27 set forth herein.

28 62. On information and belief, Defendants have infringed and continue to

1 infringe one or more claims of the 469 Patent, including but not limited to Claim
2 19, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents,
3 by making, using, offering to sell, selling, and/or importing into the United States
4 without authority SD Cards compliant with SD Specification Version 3.00 or
5 higher with CMD23 (SET_BLOCK_COUNT) functionality, as well as eMMC
6 memory compliant with the JEDEC eMMC 4.41 (JESD84-A441) standard or
7 higher (these SD and eMMC memory devices are, collectively, the “469 Patent
8 Accused Products”). The 469 Patent Accused Products include, for example and
9 without limitation, Kingston eMMC™ products (EMMC04G-M627, EMMC08G-
10 M325, EMMC16G-M525, EMMC32G-M525, EMMC64G-M525, EMMC04G-
11 S627, EMMC04G-W627, EMMC08G-W325, EMMC16G-W525, EMMC32G-
12 W525, EMMC64G-W525), Kingston SDHC/SDXC Class 10 UHS-I Cards
13 (SD10VG2/16GB, SD10VG2/32GB, SD10VG2/64GB, SD10VG2/128GB),
14 Kingston SDHC/SDXC Class 10 UHS-I Cards (SDA10/16GB, SDA10/32GB,
15 SDA10/64GB SDA10/128GB, SDA10/256GB, SDA10/512GB), Kingston
16 SDHC/SDXC UHS-I U3 Cards (SDA3/32GB, SDA3/64GB, SDA3/128GB,
17 SDA3/256GB), Kingston microSDHC Class 4 Cards (SDC4/8GBSP,
18 SDC4/16GBSP, SDC4/32GBSP), Kingston microSDHC/microSDXC Class 10
19 UHS-I Cards (SDC10G2/16GBSP, SDC10G2/32GBSP, SDC10G2/64GBSP,
20 SDC10G2/128GBSP), Kingston Gold microSD UHS-I Speed Class 3 (U3) Cards
21 (SDCG/16GBSP, SDCG/32GBSP, SDCG/64GBSP), Kingston Industrial
22 Temperature microSD UHS-I Cards (SDCIT/8GBSP, SDCIT/16GBSP,
23 SDCIT/32GBSP), Kingston microSDHC/SDXC UHS-I U3 90R/80W Cards
24 (SDCA3/32GBSP, SDCA3/64GBSP, SDCA3/128GBSP).

25 63. By way of example, on information and belief, each SD Card that is
26 a 469 Patent Accused Product is a memory device comprising a bus interface
27 configured to be coupled to a host through a bus having a data signal line (for
28 example, the SD card nine-line bus interface is configured to be coupled to an SD

1 Memory Card Host and has four data signal lines, DAT0-3), and the bus interface
2 comprises a driver at the memory device coupled to a data signal line and a receiver
3 at the memory device coupled to a data signal line (for example, each data line is
4 bidirectional and so each must be coupled to a driver to send data and a receiver to
5 receive data). *See* SD Specification 3.00 at 141. On information and belief, the
6 receiver is operable to receive information comprising a first information portion
7 and a second information portion from the host over the data signal line (for
8 example, a first and second data block) within a command execution (for example,
9 within a CMD25 multiple block write operation), and the driver is operable to drive
10 a change of state of the data signal line to the host within the command execution
11 (for example, the SD Card is operable to drive the data signal line from HIGH to
12 LOW, “busy,” within the CMD25 command execution). *See* SD Specification 3.00
13 at 11, 38, 74. On information and belief, the bus interface also comprises a
14 controller coupled to the driver and to the receiver (for example, the card interface
15 controller) that is operable to cause the change of state of the data signal line to
16 have a first meaning after receiving the first information portion within the
17 command execution and to have a second meaning different from the first meaning
18 after receiving the second information portion within the command execution from
19 the host over the data signal line (for example, when CMD23 is used in conjunction
20 with CMD25, after receiving any data block other than the final data block the data
21 signal line is held LOW for the duration of time that the buffers are busy [up to
22 250 ms] and the meaning of the change of state of the data signal line from HIGH
23 to LOW is “buffer busy,” and after receiving the final data block the data signal
24 line is held LOW for the duration of time that the card is in the programming state
25 [up to 500 ms] and the meaning of the change of state of the data signal line from
26 HIGH to LOW is “programming busy”). *Id.* at 87.

27 64. As another example, on information and belief, each eMMC memory
28 device that is a 469 Patent Accused Product is a memory device comprising a bus

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

26 65. On information and belief, Defendants have induced and continue to
27 induce infringement of one more claims of the 469 Patent, including but not limited
28 to Claim 19, pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as

1 users, customers, distributors, wholesalers, retailers, affiliates, parents,
2 subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or import into
3 the United States without authorization the 469 Patent Accused Products. The
4 making, using, offering to sell, selling, and/or importing into the United States
5 constitutes direct infringement, literally or under the doctrine of equivalents, of one
6 or more claims of the 469 Patent by such third parties. Defendants' acts of
7 inducement include: providing the 469 Patent Accused Products or components
8 thereof to third parties and intending them to make, use, offer to sell, sell, and/or
9 import the 469 Patent Accused Products; advertising the 469 Patent Accused
10 Products in the United States and encouraging the sale and offer for sale of the 469
11 Patent Accused Products by other entities by listing stores where Kingston
12 products, including specifically the 469 Patent Accused Products, can be purchased
13 (for example, <https://www.kingston.com/us/wheretobuy>); and encouraging third
14 parties to communicate directly with Defendants' representatives and providing
15 information about the 469 Patent Accused Products for purposes of technical
16 assistance, design, replacement, sales, and marketing of the 469 Patent Accused
17 Products (for example, <https://www.kingston.com/us/support>).

18 66. Defendants proceeded in this manner despite knowledge of the 469
19 Patent and their knowledge that specific actions they actively induced and continue
20 to actively induce on the part of third parties constitute infringement of the 469
21 Patent. The Defendants had knowledge of the 469 Patent and the infringement of
22 the 469 Patent no later than as described in paragraphs 32-37. At the very least,
23 because Defendants have been and remain on notice of the 469 Patent and the
24 accused infringement, they have been and remain willfully blind regarding the
25 infringement they have induced and continue to induce.

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

28 68. Defendants' infringement of the 469 Patent has been and continues to

1 be willful, deliberate, and in disregard of MTL's patent rights. The Defendants had
2 knowledge of the 469 Patent and the infringement of the 469 Patent no later than
3 as described in paragraphs 32-37, and have proceeded to infringe the 469 Patent
4 with full knowledge of that patent and its applicability to Kingston's products.
5 Defendants' intentional, knowing, egregious, culpable, willful, wanton, malicious,
6 bad faith, deliberate, consciously wrongful, and/or flagrant infringement entitles
7 MTL to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs
8 incurred in prosecuting this action under 35 U.S.C. § 285.

10 **VII. FOURTH CLAIM FOR RELIEF**

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

12 69. MTL incorporates and realleges paragraphs 1 - 68 above as if fully
13 set forth herein.

14 70. 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
16 20 and 21, 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
18 United States without authority eMMC memory compliant with the JEDEC
19 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, Kingston eMMC™ products (EMMC04G-M627, EMMC08G-M325,
22 EMMC16G-M525, EMMC32G-M525, EMMC64G-M525, EMMC04G-S627,
23 EMMC04G-W627, EMMC08G-W325, EMMC16G-W525, EMMC32G-W525,
24 EMMC64G-W525), Kingston SDHC/SDXC Class 10 UHS-I Cards
25 (SD10VG2/16GB, SD10VG2/32GB, SD10VG2/64GB, SD10VG2/128GB),
26 Kingston SDHC/SDXC Class 10 UHS-I Cards (SDA10/16GB, SDA10/32GB,
27 SDA10/64GB SDA10/128GB, SDA10/256GB, SDA10/512GB), Kingston
28 SDHC/SDXC UHS-I U3 Cards (SDA3/32GB, SDA3/64GB, SDA3/128GB,

1 SDA3/256GB), Kingston microSDHC Class 4 Cards (SDC4/8GBSP,
2 SDC4/16GBSP, SDC4/32GBSP), Kingston microSDHC/microSDXC Class 10
3 UHS-I Cards (SDC10G2/16GBSP, SDC10G2/32GBSP, SDC10G2/64GBSP,
4 SDC10G2/128GBSP), Kingston Gold microSD UHS-I Speed Class 3 (U3) Cards
5 (SDCG/16GBSP, SDCG/32GBSP, SDCG/64GBSP), Kingston Industrial
6 Temperature microSD UHS-I Cards (SDCIT/8GBSP, SDCIT/16GBSP,
7 SDCIT/32GBSP), Kingston microSDHC/SDXC UHS-I U3 90R/80W Cards
8 (SDCA3/32GBSP, SDCA3/64GBSP, SDCA3/128GBSP).

9 71. By way of example, on information and belief, each 487 Patent
10 Accused Product is a peripheral device having an MMC/SD-interface (for
11 example, an MMCinterface) configured for booting (for example, the boot
12 operation mode) a bootable host device that is configured for being booted from a
13 peripheral device having an MMC/SD interface. *See* JEDEC eMMC 4.41 at 34.
14 Each peripheral device, on information and belief, further comprises an MMC/SD-
15 interface (for example, an MMC-interface), provided with power terminal (for
16 example, Vcc and Vccq pins), a data bus with data bus terminals (for example, the
17 DAT0-DAT7 pins), a clock line with a clock terminal (for example, the CLK pin),
18 and a command line with command terminal (for example, the CMD pin). *Id.* at
19 15-16. On information and belief, each peripheral device further comprises a
20 peripheral device controller (for example, a card interface controller), connected
21 to said MMC/SD-interface. *Id.* at 16. Each peripheral device further comprises, on
22 information and belief, a memory module (for example, the memory core),
23 connected to said peripheral device controller, and wherein said peripheral device
24 controller is configured for sending the first data (for example, first boot data) of a
25 predefined storage area (for example, a boot area or user area) via a data bus,
26 starting with a start bit of the first data frame (for example, start bit “S”), when
27 receiving power at the terminal of said MMC/SD-interface of said peripheral
28 device, and a low signal at the command terminal of said MMC/SD-interface

1 during power-up (for example, holding the command line for at least 74 cycles
2 during power up). *Id.* at 16, 35-37, 108, 165.

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

9 73. On information and belief, Defendants have induced and continue to
10 induce infringement of one more claims of the 487 Patent, including but not limited
11 to Claim 20 and 21, pursuant to 35 U.S.C. § 271(b) by encouraging third parties
12 such as users, customers, distributors, wholesalers, retailers, affiliates, parents,
13 subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or import into
14 the United States without authorization the 487 Patent Accused Products. The
15 making, using, offering to sell, selling, and/or importing into the United States
16 constitutes direct infringement, literally or under the doctrine of equivalents, of one
17 or more claims of the 487 Patent by such third parties. Defendants' acts of
18 inducement include: providing the 487 Patent Accused Products or components
19 thereof to third parties and intending them to make, use, offer to sell, sell, and/or
20 import the 487 Patent Accused Products; advertising the 487 Patent Accused
21 Products in the United States and encouraging the sale and offer for sale of the 487
22 Patent Accused Products (for example,
23 <https://www.kingston.com/us/wheretobuy>); and encouraging third parties to
24 communicate directly with Defendants' representatives and providing information
25 about the 487 Patent Accused Products for purposes of technical assistance, design,
26 sales, and marketing of the 487 Patent Accused Products (for example,
27 <https://www.kingston.com/us/support>).

28 74. Defendants proceeded in this manner despite knowledge of the 487

1 Patent and their knowledge that specific actions they actively induced and continue
2 to actively induce on the part of third parties constitute infringement of the 487
3 Patent. The Defendants had knowledge of the 487 Patent and the infringement of
4 the 487 Patent no later than as described in paragraphs 32-37. At the very least,
5 because Defendants have been and remain on notice of the 487 Patent and the
6 accused infringement, they have been and remain willfully blind regarding the
7 infringement they have induced and continue to induce.

8 75. MTL has suffered and continues to suffer damages as a result of
9 Defendants' infringement of the 487 Patent.

10 76. Defendants' infringement of the 487 Patent has been and continues to
11 be willful, deliberate, and in disregard of MTL's patent rights. The Defendants had
12 knowledge of the 487 Patent and the infringement of the 487 Patent no later than
13 as described in paragraphs 32-37, and have proceeded to infringe the 487 Patent
14 with full knowledge of that patent and its applicability to Kingston's products.
15 Defendants' intentional, knowing, egregious, culpable, willful, wanton, malicious,
16 bad faith, deliberate, consciously wrongful, and/or flagrant infringement entitles
17 MTL to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs
18 incurred in prosecuting this action under 35 U.S.C. § 285.

19 **VIII. FIFTH CLAIM FOR RELIEF**

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

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

23 78. On information and belief, Defendants have infringed and continue to
24 infringe one or more claims of the 370 Patent, including but not limited to Claims
25 12 and 19 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of
26 equivalents, by making, using, offering to sell, selling, and/or importing into the
27 United States without authority eMMC memory compliant with the JEDEC
28 eMMC 4.41 (JESD84-A441) standard or higher (the "370 Patent Accused

1 Products”). The 370 Patent Accused Products include, for example and without
2 limitation, Kingston eMMC™ products (EMMC04G-M627, EMMC08G-M325,
3 EMMC16G-M525, EMMC32G-M525, EMMC64G-M525, EMMC04G-S627,
4 EMMC04G-W627, EMMC08G-W325, EMMC16G-W525, EMMC32G-W525,
5 EMMC64G-W525).

6 79. By way of example, on information and belief, each 370 Patent
7 Accused Product is an apparatus comprising an interface controller (for example,
8 a card interface controller) arranged to write protect at least one part of a memory
9 of said apparatus (for example, the addressed write-protect group) by a command
10 (for example, SET_WRITE_PROT). *See* JEDEC eMMC 4.41 at 16, 63. On
11 information and belief, each apparatus further comprises a data register (for
12 example, the Extended CSD Register) arranged to define at least one bit to indicate
13 that permanent write protection of the at least one part of the memory is allowed
14 (for example, Bit[2] and Bit[4] of the USER_WP[171] slice of the Extended CSD
15 Register). *Id.* at 128, 146. Each apparatus further comprises, on information and
16 belief, a controller (for example, the card interface controller) arranged to set the
17 at least one bit (for example, Bit[2] and Bit[4] of the USER_WP[171] slice of the
18 Extended CSD Register) in order to redefine the command (for example,
19 SET_WRITE_PROT) to allow permanent write protection, that cannot be un-
20 protected by a command (for example, a permanent clear write protect command),
21 of the at least one part of the memory of said apparatus (for example, the addressed
22 write-protect group). *Id.* at 16, 63-64, 146. On information and belief, the controller
23 in each apparatus (for example, the card interface controller) is further arranged to
24 execute the command in order to permanently write protect said at least one part
25 of the memory (for example, CMD28 or SET_WRITE_PROT). *Id.* at 16, 89.

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

28 81. On information and belief, Defendants have induced and continue to

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

19 82. Defendants proceeded in this manner despite knowledge of the 370
20 Patent and their knowledge that specific actions they actively induced and continue
21 to actively induce on the part of third parties constitute infringement of the 370
22 Patent. The Defendants had knowledge of the 370 Patent and the infringement of
23 the 370 Patent no later than as described in paragraphs 32-37. At the very least,
24 because Defendants have been and remain on notice of the 370 Patent and the
25 accused infringement, they have been and remain willfully blind regarding the
26 infringement they have induced and continue to induce.

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

1 84. Defendants' infringement of the 370 Patent has been and continues to
 2 be 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 no later than
 4 as described in paragraphs 32-37, and have proceeded to infringe the 370 Patent
 5 with full knowledge of that patent and its applicability to Kingston's products.
 6 Defendants' intentional, knowing, egregious, culpable, willful, wanton, malicious,
 7 bad faith, deliberate, consciously wrongful, and/or flagrant infringement entitles
 8 MTL to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs
 9 incurred in prosecuting this action under 35 U.S.C. § 285.

10 IX. SIXTH CLAIM FOR RELIEF

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

12 85. MTL incorporates and realleges paragraphs 1 - 84 above as if fully
 13 set forth herein.

14 86. On information and belief, Defendants have infringed and continue to
 15 infringe one or more claims of the 180 Patent, including but not limited to Claims
 16 17-19 and 21-22 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
 18 United States without authority SD Cards compliant with SD Specification Version
 19 3.00 or higher with Speed Class Control Command Functionality, as well as
 20 eMMC memory, compliant with the JEDEC eMMC 4.51 (JESD84-B451) standard
 21 or higher (these SD Cards and eMMC memory devices are, collectively, the "180
 22 Patent Accused Products"). The 180 Patent Accused Products include, for example
 23 and without limitation, Kingston eMMC™ products (EMMC04G-M627,
 24 EMMC08G-M325, EMMC16G-M525, EMMC32G-M525, EMMC64G-M525,
 25 EMMC04G-S627, EMMC04G-W627, EMMC08G-W325, EMMC16G-W525,
 26 EMMC32G-W525, EMMC64G-W525), Kingston SDHC/SDXC Class 10 UHS-I
 27 Cards (SD10VG2/16GB, SD10VG2/32GB, SD10VG2/64GB,
 28 SD10VG2/128GB), Kingston SDHC/SDXC Class 10 UHS-I Cards

1 (SDA10/16GB, SDA10/32GB, SDA10/64GB SDA10/128GB, SDA10/256GB,
2 SDA10/512GB), Kingston SDHC/SDXC UHS-I U3 Cards (SDA3/32GB,
3 SDA3/64GB, SDA3/128GB, SDA3/256GB), Kingston microSDHC Class 4 Cards
4 (SDC4/8GBSP, SDC4/16GBSP, SDC4/32GBSP), Kingston
5 microSDHC/microSDXC Class 10 UHS-I Cards (SDC10G2/16GBSP,
6 SDC10G2/32GBSP, SDC10G2/64GBSP, SDC10G2/128GBSP), Kingston Gold
7 microSD UHS-I Speed Class 3 (U3) Cards (SDCG/16GBSP, SDCG/32GBSP,
8 SDCG/64GBSP), Kingston Industrial Temperature microSD UHS-I Cards
9 (SDCIT/8GBSP, SDCIT/16GBSP, SDCIT/32GBSP), Kingston
10 microSDHC/SDXC UHS-I U3 90R/80W Cards (SDCA3/32GBSP,
11 SDCA3/64GBSP, SDCA3/128GBSP).

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

1 for the at least one usage (for example, CMD20, the Speed Class Control
2 Command, configures the Allocation Units, “AUs,” which are portions of the user
3 area of the memory device, such that the host writes sequentially in an AU
4 according to the Speed Class Profile to ensure recording meets the minimum
5 performance rate). *Id.* at 93, 108-09, 113-15, 117-19.

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

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

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

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

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

1 4.51 at 81, 152, 184. On information and belief, the memory device also comprises
2 a controller for receiving one or more commands (for example, an eMMC Device
3 Controller) related to at least one usage of said memory device, and the one or
4 more commands activate the one or more predefined access profiles associated
5 with the memory device (for example, CMD6 writes a non-zero value into bits
6 [1:0] of a context configuration register). *Id.* at 7, 41, 81, 103, 149, 184. On
7 information and belief, the controller is also for configuring access to the memory
8 device in accordance with at least one of the predefined access profiles so that the
9 memory device is effective for the at least one usage (for example, CMD23 with
10 the subsequent read and/or write commands defines a portion of the memory to be
11 configured in accordance with the designated context). *Id.* at 81, 105.

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

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

21 95. On information and belief, one or more access profiles are adapted to
22 produce an optimized performance associated with said memory device. *Id.* at 81.

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

28 97. On information and belief, Defendants have induced and continue to

1 induce infringement of one more claims of the 180 Patent, including but not limited
2 to Claim 17-19, and 21-22, pursuant to 35 U.S.C. § 271(b) by encouraging third
3 parties such as users, customers, distributors, wholesalers, retailers, affiliates,
4 parents, subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or
5 import into the United States without authorization the 180 Patent Accused
6 Products. The making, using, offering to sell, selling, and/or importing into the
7 United States constitutes direct infringement, literally or under the doctrine of
8 equivalents, of one or more claims of the 180 Patent by such third parties.
9 Defendants' acts of inducement include: providing the 180 Patent Accused
10 Products or components thereof to third parties and intending them to make, use,
11 offer to sell, sell, and/or import the 180 Patent Accused Products; advertising the
12 180 Patent Accused Products in the United States and encouraging the sale and
13 offer for sale of the 180 Patent Accused Products by other entities by listing stores
14 where Kingston products, including specifically the 180 Patent Accused Products,
15 can be purchased (for example, <https://www.kingston.com/us/wheretobuy>); and
16 encouraging third parties to communicate directly with Defendants'
17 representatives and providing information about the 180 Patent Accused Products
18 for purposes of technical assistance, design, replacement, sales, and marketing of
19 the 180 Patent Accused Products (for example,
20 <https://www.kingston.com/us/support>).

21 98. Defendants proceeded in this manner despite knowledge of the 180
22 Patent and their knowledge that specific actions they actively induced and continue
23 to actively induce on the part of third parties constitute infringement of the 180
24 Patent. The Defendants had knowledge of the 180 Patent and the infringement of
25 the 180 Patent no later than as described in paragraphs 32-37. At the very least,
26 because Defendants have been and remain on notice of the 180 Patent and the
27 accused infringement, they have been and remain willfully blind regarding the
28 infringement they have induced and continue to induce.

1 99. MTL has suffered and continues to suffer damages as a result of
2 Defendants' infringement of the 180 Patent.

3 100. Defendants' infringement of the 180 Patent has been and continues to
4 be willful, deliberate, and in disregard of MTL's patent rights. The Defendants had
5 knowledge of the 180 Patent and the infringement of the 180 Patent no later than
6 as described in paragraphs 32-37, and have proceeded to infringe the 180 Patent
7 with full knowledge of that patent and its applicability to Kingston's products.
8 Defendants' intentional, knowing, egregious, culpable, willful, wanton, malicious,
9 bad faith, deliberate, consciously wrongful, and/or flagrant infringement entitles
10 MTL to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs
11 incurred in prosecuting this action under 35 U.S.C. § 285.

12 **X. SEVENTH CLAIM FOR RELIEF**

13 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 9,063,850**

14 101. MTL incorporates and realleges paragraphs 1 - 100 above as if fully
15 set forth herein.

16 102. On information and belief, Defendants have infringed and continue to
17 infringe one or more claims of the 850 Patent, including but not limited to Claims
18 10 and 13, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of
19 equivalents, by making, using, offering to sell, selling, and/or importing into the
20 United States without authority SD Cards compliant with SD Specification Version
21 3.00 or higher with Speed Class Control Command Functionality, as well as
22 eMMC memory compliant with the JEDEC eMMC 4.51 (JESD84-B451) standard
23 or higher (these SD Cards and eMMC memory devices are, collectively, the "850
24 Patent Accused Products"). The 850 Patent Accused Products include, for example
25 and without limitation, Kingston eMMC™ products (EMMC04G-M627,
26 EMMC08G-M325, EMMC16G-M525, EMMC32G-M525, EMMC64G-M525,
27 EMMC04G-S627, EMMC04G-W627, EMMC08G-W325, EMMC16G-W525,
28 EMMC32G-W525, EMMC64G-W525), Kingston SDHC/SDXC Class 10 UHS-I

1 Cards (SD10VG2/16GB, SD10VG2/32GB, SD10VG2/64GB,
2 SD10VG2/128GB), Kingston SDHC/SDXC Class 10 UHS-I Cards
3 (SDA10/16GB, SDA10/32GB, SDA10/64GB SDA10/128GB, SDA10/256GB,
4 SDA10/512GB), Kingston SDHC/SDXC UHS-I U3 Cards (SDA3/32GB,
5 SDA3/64GB, SDA3/128GB, SDA3/256GB), Kingston microSDHC Class 4 Cards
6 (SDC4/8GBSP, SDC4/16GBSP, SDC4/32GBSP), Kingston
7 microSDHC/microSDXC Class 10 UHS-I Cards (SDC10G2/16GBSP,
8 SDC10G2/32GBSP, SDC10G2/64GBSP, SDC10G2/128GBSP), Kingston Gold
9 microSD UHS-I Speed Class 3 (U3) Cards (SDCG/16GBSP, SDCG/32GBSP,
10 SDCG/64GBSP), Kingston Industrial Temperature microSD UHS-I Cards
11 (SDCIT/8GBSP, SDCIT/16GBSP, SDCIT/32GBSP), Kingston
12 microSDHC/SDXC UHS-I U3 90R/80W Cards (SDCA3/32GBSP,
13 SDCA3/64GBSP, SDCA3/128GBSP).

14 103. By way of example, on information and belief, each SD Card that is
15 a 850 Patent Accused Product is a memory device comprising one or more
16 predefined access profiles (for example, Speed Class profiles Class 2, Class 4,
17 Class 6, and Class 10) to determine how access to the memory device is configured
18 for at least one usage of the memory device (for example, a write using a Speed
19 Class), and a controller configured to receive at least one first command (for
20 example, a card interface controller) to activate at least one of the predefined access
21 profiles associated with the memory device (for example, Initialization Command
22 ACMD41 activates at least one Speed Class profile by setting the XPC bit,
23 command frame bit 36, to 1) and to receive at least one second command (for
24 example, CMD20, the Speed Class Control Command) to configure access to the
25 memory device in accordance with the at least one of the one more predefined
26 access profiles such that at least a portion of the memory device is configured
27 according to the at least one of the more or more predefined access profiles for the
28 at least one usage (for example, CMD20 configures the Allocation Units, “AUs,”

1 which are portions of the user area of the memory device, such that the host writes
2 sequentially in an AU according to the Speed Class Profile to ensure recording
3 meets the minimum performance rate). *See* SD Specification 3.00 at 7, 15, 27, 89,
4 93, 108-09, 113-15, 117-19.

5 104. As another example, on information and belief, each eMMC memory
6 device that is a 850 Patent Accused Product is a memory device comprising one or
7 more predefined access profiles (for example, an eMMC device has up to 15
8 contexts and has context configuration information that may be associated with a
9 context) to determine how access to the memory device is configured for at least
10 one usage of the memory device (for example, a read or write), and a controller
11 configured to receive at least one first command (for example, an eMMC Device
12 Controller) to activate at least one of the one more predefined access profiles
13 associated with the memory device (for example, CMD6 writes a non-zero value
14 into bits [1:0] of a context configuration register) and to receive at least one second
15 command (for example, CMD23) to configure access to the memory device in
16 accordance with the at least one of the one more predefined access profiles such
17 that at least a portion of the memory device is configured according to the at least
18 one of the more or more predefined access profiles for the at least one usage (for
19 example, CMD23 with the subsequent read and/or write commands defines a
20 portion of the memory to be configured in accordance with the designated context).
21 *See* JEDEC Embedded MultiMediaCard (e.MMC), Electrical Standard 4.51,
22 JESD84-B451 (June 2012) at 7, 41, 81, 103, 105, 149, 152, 184 (“JEDEC eMMC
23 4.51”).

24 105. On information and belief, each eMMC memory device comprises an
25 embedded MultiMediaCard (eMMC) device.

26 106. On information and belief, Defendants have induced and continue to
27 induce infringement of one more claims of the 850 Patent, including but not limited
28 to Claim 10, pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as

1 users, customers, distributors, wholesalers, retailers, affiliates, parents,
2 subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or import into
3 the United States without authorization the 850 Patent Accused Products. The
4 making, using, offering to sell, selling, and/or importing into the United States
5 constitutes direct infringement, literally or under the doctrine of equivalents, of one
6 or more claims of the 850 Patent by such third parties. Defendants' acts of
7 inducement include: providing the 850 Patent Accused Products or components
8 thereof to third parties and intending them to make, use, offer to sell, sell, and/or
9 import the 850 Patent Accused Products; advertising the 850 Patent Accused
10 Products in the United States and encouraging the sale and offer for sale of the 850
11 Patent Accused Products by other entities by listing stores where Kingston
12 products, including specifically the 850 Patent Accused Products, can be purchased
13 (for example, <https://www.kingston.com/us/wheretobuy>); and encouraging third
14 parties to communicate directly with Defendants' representatives and providing
15 information about the 850 Patent Accused Products for purposes of technical
16 assistance, design, replacement, sales, and marketing of the 850 Patent Accused
17 Products (for example, <https://www.kingston.com/us/support>).

18 107. Defendants proceeded in this manner despite knowledge of the related
19 180 Patent and the 850 Patent and their knowledge that specific actions they
20 actively induced and continue to actively induce on the part of third parties
21 constitute infringement of the 850 Patent. The Defendants had knowledge of the
22 850 Patent and the related 180 Patent, and the infringement of the 850 Patent no
23 later than as described in paragraphs 32-37. At the very least, because Defendants
24 have been and remain on notice of the 850 Patent and the accused infringement,
25 they have been and remain willfully blind regarding the infringement they have
26 induced and continue to induce.

27 108. MTL has suffered and continues to suffer damages as a result of
28 Defendants' infringement of the 850 Patent.

1 109. Defendants' infringement of the 850 Patent has been and continues to
2 be willful, deliberate, and in disregard of MTL's patent rights. The Defendants had
3 knowledge of the 850 Patent and the related 180 Patent and the infringement of the
4 850 Patent no later than as described in paragraphs 32-37, and have proceeded to
5 infringe the 850 Patent with full knowledge of that patent and its applicability to
6 Kingston's products. Kingston's intentional, knowing, egregious, culpable, willful,
7 wanton, malicious, bad faith, deliberate, consciously wrongful, and/or flagrant
8 infringement entitles MTL to increased damages under 35 U.S.C. § 284 and to
9 attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

10 XI. EIGHTH CLAIM FOR RELIEF

11 **DEFENDANTS' INFRINGEMENT OF U.S. PATENT NO. 9,367,486**

12 110. MTL incorporates and realleges paragraphs 1 - 109 above as if fully
13 set forth herein.

14 111. On information and belief, Defendants have infringed and continue to
15 infringe one or more claims of the 486 Patent, including but not limited to Claim
16 8, 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
18 without authority SD Cards compliant with SD Specification Version 3.00 or
19 higher with Speed Class Control Command Functionality, as well as eMMC
20 memory compliant with the JEDEC eMMC 4.51 (JESD84-B451) standard or
21 higher (these SD Cards and eMMC memory devices are, collectively, the "486
22 Patent Accused Products"). The 486 Patent Accused Products include, for example
23 and without limitation, Kingston eMMC™ products (EMMC04G-M627,
24 EMMC08G-M325, EMMC16G-M525, EMMC32G-M525, EMMC64G-M525,
25 EMMC04G-S627, EMMC04G-W627, EMMC08G-W325, EMMC16G-W525,
26 EMMC32G-W525, EMMC64G-W525), Kingston SDHC/SDXC Class 10 UHS-I
27 Cards (SD10VG2/16GB, SD10VG2/32GB, SD10VG2/64GB,
28 SD10VG2/128GB), Kingston SDHC/SDXC Class 10 UHS-I Cards

1 (SDA10/16GB, SDA10/32GB, SDA10/64GB SDA10/128GB, SDA10/256GB,
2 SDA10/512GB), Kingston SDHC/SDXC UHS-I U3 Cards (SDA3/32GB,
3 SDA3/64GB, SDA3/128GB, SDA3/256GB), Kingston microSDHC Class 4 Cards
4 (SDC4/8GBSP, SDC4/16GBSP, SDC4/32GBSP), Kingston
5 microSDHC/microSDXC Class 10 UHS-I Cards (SDC10G2/16GBSP,
6 SDC10G2/32GBSP, SDC10G2/64GBSP, SDC10G2/128GBSP), Kingston Gold
7 microSD UHS-I Speed Class 3 (U3) Cards (SDCG/16GBSP, SDCG/32GBSP,
8 SDCG/64GBSP), Kingston Industrial Temperature microSD UHS-I Cards
9 (SDCIT/8GBSP, SDCIT/16GBSP, SDCIT/32GBSP), Kingston
10 microSDHC/SDXC UHS-I U3 90R/80W Cards (SDCA3/32GBSP,
11 SDCA3/64GBSP, SDCA3/128GBSP).

12 112. By way of example, on information and belief, each SD Card that is
13 a 486 Patent Accused Product is configured to perform during operation a method
14 including receiving one or more commands to activate at least one predefined
15 access profile (for example, receiving a Speed Class Control Command [CMD20]
16 to activate at least one of the Speed Class Control profiles by setting a
17 corresponding value into the SCC argument bits) of two or more predefined access
18 profiles (for example, the SCC argument bits can correspond to Speed Class
19 Control profiles including a Start Recording profile and a Create DIR profile)
20 associated with a memory device. *See* SD Specification 3.00 at 15, 117-19. The
21 two or more predefined access profiles determine how access to the memory device
22 is configured for at least one usage of the memory device, and a first predefined
23 access profile corresponds to a random mode of access (for example, Create DIR
24 corresponds to writing to a specified address in a random mode) and second
25 predefined access profile corresponds to a sequential mode of access (for example,
26 Start Recording corresponds to stream recording/writing which is sequential
27 access). *See Id.* Each SD Card that is a 486 Patent Accused Product is further
28 configured to configure access to the memory device in accordance with the at

1 least one predefined access profile such that at least a portion of the memory device
2 is configured according to the at least one predefined access profile for the at least
3 one usage (for example, CMD20 configures the Allocation Units, “AUs,” which
4 are portions of the user area of the memory device, such that the host writes
5 sequentially in an AU according to the Speed Class Profile to ensure recording
6 meets the minimum performance rate). *See* SD Specification 3.00 at 7, 15, 27, 89,
7 93, 108-09, 113-15, 117-19.

8 113. As another example, on information and belief, each eMMC memory
9 device that is a 486 Patent Accused Product is configured to perform during
10 operation a method including receiving one or more commands to activate at least
11 one predefined access profile (for example, CMD6 writes a non-zero value into
12 bits [1:0] of a context configuration register) of two or more predefined access
13 profiles (for example, an eMMC device has up to 15 contexts and has context
14 configuration information that may be associated with a context) associated with a
15 memory device. *See* JEDEC Embedded MultiMediaCard (e.MMC), Electrical
16 Standard 4.51, JESD84-B451 (June 2012) at 7, 41, 81, 103, 105, 149, 152, 184
17 (“JEDEC eMMC 4.51”). The two or more predefined access profiles determine
18 how access to the memory device is configured for at least one usage of the
19 memory device, and a first predefined access profile corresponds to a random
20 mode of access (for example, some contexts can correspond to small random
21 operations) and second predefined access profile corresponds to a sequential mode
22 of access (for example, some contexts can correspond to large sequential
23 operations). *See Id.* Each eMMC memory device Card that is a 486 Patent Accused
24 Product is further configured to configure access to the memory device in
25 accordance with the at least one predefined access profile such that at least a
26 portion of the memory device is configured according to the at least one predefined
27 access profile for the at least one usage (for example, CMD23 with the subsequent
28 read and/or write commands defining a portion of the memory to be configured in

1 accordance with the designated context). *See Id.*

2 114. On information and belief, Defendants have induced and continue to
3 induce infringement of one more claims of the 486 Patent, including but not limited
4 to Claim 8, pursuant to 35 U.S.C. § 271(b) by encouraging third parties such as
5 users, customers, distributors, wholesalers, retailers, affiliates, parents,
6 subsidiaries, importers, or sellers to make, use, offer to sell, sell, and/or import into
7 the United States without authorization the 486 Patent Accused Products. The
8 making, using, offering to sell, selling, and/or importing into the United States
9 constitutes direct infringement, literally or under the doctrine of equivalents, of one
10 or more claims of the 486 Patent by such third parties. Defendants' acts of
11 inducement include: providing the 486 Patent Accused Products or components
12 thereof to third parties and intending them to make, use, offer to sell, sell, and/or
13 import the 486 Patent Accused Products; advertising the 486 Patent Accused
14 Products in the United States and encouraging the sale and offer for sale of the 486
15 Patent Accused Products by other entities by listing stores where Kingston
16 products, including specifically the 486 Patent Accused Products, can be purchased
17 (for example, <https://www.kingston.com/us/wheretobuy>); and encouraging third
18 parties to communicate directly with Defendants' representatives and providing
19 information about the 486 Patent Accused Products for purposes of technical
20 assistance, design, replacement, sales, and marketing of the 486 Patent Accused
21 Products (for example, <https://www.kingston.com/us/support>)

22 115. Defendants proceeded in this manner despite knowledge of the 486
23 Patent and the related 180 and 850 Patents and their knowledge that the specific
24 actions they actively induced and continue to actively induce on the part of third
25 parties constitute infringement of the 486 Patent. The Defendants had knowledge
26 of the 486 Patent and the related 180 and 850 Patents, and the infringement of the
27 486 Patent, no later than as described in paragraphs 32-37. At the very least,
28 because Defendants have been and remain on notice of the 486 Patent and the

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

3 116. MTL has suffered and continues to suffer damages as a result of
4 Defendants' infringement of the 486 Patent.

5 117. Defendants' infringement of the 486 Patent has been and continues to
6 be willful, deliberate, and in disregard of MTL's patent rights. The Defendants had
7 knowledge of the 486 Patent and the related 180 and 850 Patents and the
8 infringement of the 486 Patent no later than as described in paragraphs 32-37, and
9 have proceeded to infringe the 850 Patent with full knowledge of that patent and
10 its applicability to Kingston's products. Kingston's intentional, knowing,
11 egregious, culpable, willful, wanton, malicious, bad faith, deliberate, consciously
12 wrongful, and/or flagrant infringement entitles MTL to increased damages under
13 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action
14 under 35 U.S.C. § 285.

15 **XII. PRAYER FOR RELIEF**

16 MTL respectfully prays for relief as follows:

- 17 A. a judgment that Defendants have infringed and continue to infringe
18 one or more claims of the Asserted Patents;
- 19 B. a judgment that Defendants have induced infringement and continue
20 to induce infringement of one or more claims of the Asserted Patents;
- 21 C. a judgment that Defendants have willfully infringed one or more
22 claims of the Asserted Patents;
- 23 D. a judgment awarding MTL all damages adequate to compensate for
24 Defendants' infringement, and in no event less than a reasonable
25 royalty for Defendants' infringement, including all pre-judgment and
26 post-judgment interest at the maximum rate allowed by law;
- 27 E. a judgment awarding MTL treble damages pursuant to 35 U.S.C. §
28 284 as a result of Defendants' willful conduct;

1 F. a judgment and order finding that this is an exceptional case within
2 the meaning of 35 U.S.C. § 285 and awarding MTL its reasonable
3 Attorneys' Fees and Taxable Costs incurred in connection with this
4 action, pursuant to 35 U.S.C. §285 and the teachings of the U.S.
5 Supreme Court in the *Octane Fitness LLC v. Icon Health & Fitness*
6 *Inc.*, 572 U.S. ____, 134 S. Ct. 1749 (2014) line of cases and their more
7 recent progeny.

8 G. For such additional and further relief in law and equity, as the Court
9 may deem just and proper.

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Respectfully submitted,

LEE & HAYES PLLC

Dated: January 31, 2018

/s/Andrew G. Strickland

Andrew G. Strickland (CA SBN 272364)

William B. Dyer III (*Pro Hac Vice* To Be
Filed)

Lee & Hayes, PLLC

Attorneys for Plaintiff,

MEMORY TECHNOLOGIES, LLC

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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.

Respectfully submitted,
LEE & HAYES PLLC

Dated: January 31, 2018

/s/Andrew G. Strickland
Andrew G. Strickland (CA SBN 272364)
William B. Dyer III (*Pro Hac Vice* To Be
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