

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

ROUND ROCK RESEARCH, LLC,

Plaintiff,

v.

SANDISK CORPORATION,

Defendant.

Civil Action No. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT**

Plaintiff Round Rock Research, LLC (“Round Rock”), for its Complaint against Defendant SanDisk Corporation (“SanDisk”), hereby alleges as follows:

**The Parties**

1. Plaintiff Round Rock is a Delaware limited liability company with its principal place of business at 26 Deer Creek Lane, Mount Kisco, NY 10549.
2. Defendant SanDisk is a corporation organized and existing under the laws of Delaware with its principal place of business in Milpitas, California.

**Nature Of The Action**

3. This is a civil action for infringement of eleven United States patents, arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

**Jurisdiction And Venue**

4. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b) and (c), and 1400(b), because SanDisk resides in this district, is subject to personal jurisdiction in this district, and has committed acts of infringement in this district.

#### **The Patents-In-Suit**

6. United States Patent No. 5,615,159 (“the ’159 patent”), entitled “Memory System With Non-Volatile Data Storage Unit And Method Of Initializing Same,” was duly and legally issued by the United States Patent and Trademark Office on March 25, 1997. A copy of the ’159 patent is attached hereto as Exhibit A.

7. United States Patent No. 6,034,440 (“the ’440 patent”), entitled “Method Of Improving Interconnect Of Semiconductor Devices By Utilizing A Flattened Ball Bond,” was duly and legally issued by the United States Patent and Trademark Office on March 7, 2000. A copy of the ’440 patent is attached hereto as Exhibit B.

8. United States Patent No. 6,654,847 (“the ’847 patent”), entitled “Top/Bottom Symmetrical Protection Scheme For Flash,” was duly and legally issued by the United States Patent and Trademark Office on November 25, 2003. A copy of the ’847 patent is attached hereto as Exhibit C.

9. United States Patent No. 6,728,798 (“the ’798 patent”), entitled “Synchronous Flash Memory With Status Burst Output,” was duly and legally issued by the United States Patent and Trademark Office on April 27, 2004. A copy of the ’798 patent is attached hereto as Exhibit D.

10. United States Patent No. 6,845,053 (“the ’053 patent”), entitled “Power Throughput Adjustment In Flash Memory,” was duly and legally issued by the United States

Patent and Trademark Office on January 18, 2005. A copy of the '053 patent is attached hereto as Exhibit E.

11. United States Patent No. 6,948,041 (“the '041 patent”), entitled “Permanent Memory Block Protection In A Flash Memory Device,” was duly and legally issued by the United States Patent and Trademark Office on September 20, 2005. A copy of the '041 patent is attached hereto as Exhibit F.

12. United States Patent No. 7,336,531 (“the '531 patent”), entitled “Multiple Level Cell Memory Device With Single Bit Per Cell, Re-Mappable Memory Block,” was duly and legally issued by the United States Patent and Trademark Office on February 26, 2008. A copy of the '531 patent is attached hereto as Exhibit G.

13. United States Patent No. 7,692,984 (“the '984 patent”), entitled “System and Method For Initiating A Bad Block Disable Process In A Non-Volatile Memory,” was duly and legally issued by the United States Patent and Trademark Office on April 6, 2010. A copy of the '984 patent is attached hereto as Exhibit H.

14. United States Patent No. 7,742,344 (“the Roohparvar '344 patent”), entitled “Method and Apparatus For Improving Storage Performance Using A Background Erase,” was duly and legally issued by the United States Patent and Trademark Office on June 22, 2010. A copy of the Roohparvar '344 patent is attached hereto as Exhibit I.

15. United States Patent No. 8,023,344 (“the Kinsley '344 patent”), entitled “Data Retention Kill Function,” was duly and legally issued by the United States Patent and Trademark Office on September 20, 2011. A copy of the Kinsley '344 patent is attached hereto as Exhibit J.

16. United States Patent No. 8,060,719 (“the ’719 patent”), entitled “Hybrid Memory Management,” was duly and legally issued by the United States Patent and Trademark Office on November 15, 2011. A copy of the ’719 patent is attached hereto as Exhibit K.

17. Round Rock is the exclusive owner of all rights, title, and interest in each of the patents-in-suit, and has the right to bring this suit to recover damages for any current or past infringement of each of the patents-in-suit.

### **COUNT I**

#### **Infringement Of The ’159 Patent**

18. Paragraphs 1 through 17 are incorporated by reference as if fully stated herein.

19. The ’159 patent is valid and enforceable.

20. SanDisk has infringed, and continues to infringe, one or more claims of the ’159 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk iNAND eMMC embedded flash drives (collectively, “the ’159 Accused Products”), such as, for example, SanDisk products that comply with SanDisk’s eMMC v4.41 specification and JEDEC Standard JESD84-A441.

21. Round Rock has been and continues to be damaged by SanDisk’s infringement of the ’159 patent.

22. SanDisk’s conduct in infringing the ’159 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## COUNT II

### **Infringement Of The '440 Patent**

23. Paragraphs 1 through 22 are incorporated by reference as if fully stated herein.

24. The '440 patent is valid and enforceable.

25. SanDisk has infringed, and continues to infringe, one or more claims of the '440 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk microSD flash memory cards (collectively, "the '440 Accused Products"), such as, for example, SanDisk's 16GB microSD memory card.

26. Round Rock has been and continues to be damaged by SanDisk's infringement of the '440 patent.

27. SanDisk's conduct in infringing the '440 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## COUNT III

### **Infringement Of The '847 Patent**

28. Paragraphs 1 through 27 are incorporated by reference as if fully stated herein.

29. The '847 patent is valid and enforceable.

30. SanDisk has infringed, and continues to infringe, one or more claims of the '847 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk iNAND eMMC embedded

flash drives (collectively, “the ’847 Accused Products”), such as, for example, SanDisk products that comply with SanDisk’s eMMC v4.41 specification and JEDEC Standard JESD84-A441.

31. Round Rock has been and continues to be damaged by SanDisk’s infringement of the ’847 patent.

32. SanDisk’s conduct in infringing the ’847 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

#### **COUNT IV**

##### **Infringement Of The ’798 Patent**

33. Paragraphs 1 through 32 are incorporated by reference as if fully stated herein.

34. The ’798 patent is valid and enforceable.

35. SanDisk has infringed, and continues to infringe, one or more claims of the ’798 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk iNAND eMMC embedded flash drives, and SanDisk’s family of SD memory cards including its SD, SDHC, SDXC, microSD, microSDHC, and microSDXC (collectively, “the ’798 Accused Products”), such as, for example, SanDisk products that comply with SanDisk’s eMMC v4.41 specification and JEDEC Standard JESD84-A441 and SD cards.

36. Round Rock has been and continues to be damaged by SanDisk’s infringement of the ’798 patent.

37. SanDisk’s conduct in infringing the ’798 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## COUNT V

### **Infringement Of The '053 Patent**

38. Paragraphs 1 through 37 are incorporated by reference as if fully stated herein.

39. The '053 patent is valid and enforceable.

40. SanDisk has infringed, and continues to infringe, one or more claims of the '053 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk iNAND eMMC embedded flash drives (collectively, "the '053 Accused Products"), such as, for example, SanDisk products that comply with SanDisk's eMMC v4.41 specification and JEDEC Standard JESD84-A441.

41. Round Rock has been and continues to be damaged by SanDisk's infringement of the '053 patent.

42. SanDisk's conduct in infringing the '719 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## COUNT VI

### **Infringement Of The '041 Patent**

43. Paragraphs 1 through 42 are incorporated by reference as if fully stated herein.

44. The '041 patent is valid and enforceable.

45. SanDisk has infringed, and continues to infringe, one or more claims of the '041 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by

making, using, selling, offering for sale, and/or importing SanDisk iNAND eMMC embedded flash drives (collectively, “the ’041 Accused Products”), such as, for example, SanDisk products that comply with SanDisk’s eMMC v4.41 specification and JEDEC Standard JESD84-A441.

46. Round Rock has been and continues to be damaged by SanDisk’s infringement of the ’041 patent.

47. SanDisk’s conduct in infringing the ’041 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## **COUNT VII**

### **Infringement Of The ’531 Patent**

48. Paragraphs 1 through 47 are incorporated by reference as if fully stated herein.

49. The ’531 patent is valid and enforceable.

50. SanDisk has infringed, and continues to infringe, one or more claims of the ’531 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk solid state drives (collectively, “the ’531 Accused Products”), such as, for example, SanDisk pSSD Solid State Drive (SATA) P4.

51. Round Rock has been and continues to be damaged by SanDisk’s infringement of the ’531 patent.

52. SanDisk’s conduct in infringing the ’531 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.



## COUNT VIII

### **Infringement Of The '984 Patent**

53. Paragraphs 1 through 52 are incorporated by reference as if fully stated herein.

54. The '984 patent is valid and enforceable.

55. SanDisk has infringed, and continues to infringe, one or more claims of the '984 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by using in the United States methods encompassed by those claims, including for example, by using SanDisk iNAND eMMC embedded flash drives (collectively, "the '984 Accused Products"), such as, for example, SanDisk products that comply with SanDisk's eMMC v4.41 specification and JEDEC Standard JESD84-A441.

56. Round Rock has been and continues to be damaged by SanDisk's infringement of the '984 patent.

57. SanDisk's conduct in infringing the '984 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## COUNT IX

### **Infringement Of The Roohparvar '344 patent**

58. Paragraphs 1 through 57 are incorporated by reference as if fully stated herein.

59. The Roohparvar '344 patent is valid and enforceable.

60. SanDisk has infringed, and continues to infringe, one or more claims of the Roohparvar '344 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk

iNAND eMMC embedded flash drives (collectively, “the Roohparvar ’344 Accused Products”), such as, for example, SanDisk products that comply with SanDisk’s eMMC v4.41 specification and JEDEC Standard JESD84-A441.

61. Round Rock has been and continues to be damaged by SanDisk’s infringement of the Roohparvar ’344 patent.

62. SanDisk’s conduct in infringing the Roohparvar ’344 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

### **COUNT X**

#### **Infringement Of The Kinsley ’344 patent**

63. Paragraphs 1 through 62 are incorporated by reference as if fully stated herein.

64. The Kinsley ’344 patent is valid and enforceable.

65. SanDisk has infringed, and continues to infringe, one or more claims of the Kinsley ’344 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk iNAND eMMC embedded flash drives (collectively, “the Kinsley ’344 Accused Products”), such as, for example, SanDisk products that comply with SanDisk’s eMMC v4.41 specification and JEDEC Standard JESD84-A441.

66. Round Rock has been and continues to be damaged by SanDisk’s infringement of the Kinsley ’344 patent.

67. SanDisk’s conduct in infringing the Kinsley ’344 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

## COUNT XI

### **Infringement Of The '719 Patent**

68. Paragraphs 1 through 67 are incorporated by reference as if fully stated herein.

69. The '719 patent is valid and enforceable.

70. SanDisk has infringed, and continues to infringe, one or more claims of the '719 patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products and/or methods encompassed by those claims, including for example, by making, using, selling, offering for sale, and/or importing SanDisk solid state drives (collectively, "the '719 Accused Products"), such as, for example, SanDisk pSSD Solid State Drive (SATA) P4.

71. Round Rock has been and continues to be damaged by SanDisk's infringement of the '719 patent.

72. SanDisk's conduct in infringing the '719 patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

### Prayer For Relief

WHEREFORE, Round Rock prays for judgment as follows:

A. That SanDisk has infringed each of the patents-in-suit;

B. That Round Rock be awarded all damages adequate to compensate it for SanDisk's infringement of the patents-in-suit, such damages to be determined by a jury and, if necessary to adequately compensate Round Rock for the infringement, an accounting, and that such damages be trebled and awarded to Round Rock with pre-judgment and post-judgment interest;

C. That this case be declared an exceptional case within the meaning of 35 U.S.C. § 285 and that Round Rock be awarded the attorney fees, costs, and expenses that it incurs prosecuting this action; and

D. That Round Rock be awarded such other and further relief as this Court deems just and proper.

**Demand For Jury Trial**

Plaintiff Round Rock hereby demands a trial by jury on all issues so triable.

Dated: May 3, 2012

FARNAN LLP

/s/ Joseph J. Farnan, III

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