

**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

INNOVATIONS IN MEMORY LLC,

Plaintiff,

v.

DELL TECHNOLOGIES INC. and DELL
INC.,

Defendants.

Case No. 1:24-cv-00602

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.*, in which Plaintiff Innovations In Memory LLC (“Plaintiff” or “IIM”) makes the following allegations against Defendants Dell Technologies Inc. and Dell Inc. (collectively, “Defendants” or “Dell”):

INTRODUCTION

1. This complaint arises from IBM’s unlawful infringement of the following United States patents owned by Plaintiff concerning improvements in memory storage devices and systems: United States Patent Nos. 8,285,961 (“the ’961 Patent”); 9,304,714 (“the ’714 Patent”); 8,452,929 (“the ’929 Patent”); 7,672,226 (“the ’226 Patent”); 8,160,070 (“the ’070 Patent”); and 8,417,871 (“the ’871 Patent”) (collectively, the “Asserted Patents”).

PARTIES

2. Plaintiff Innovations In Memory LLC is a Delaware limited liability corporation, with its principal place of business at 5 Hilldale Lane, Sands Point, NY 11050. IIM is the sole owner by assignment of all right, title, and interest in the Asserted Patents, including the right to

recover for past, present, and future infringement. IIM owns an extensive patent portfolio that was developed by Violin Memory Inc. (“Violin”) over the course of its 15 years of pioneering work in flash memory storage solutions, as well as the patent assets of GridIron Systems and Xiotech Corporation, which were both acquired by Violin. IIM’s portfolio includes 299 U.S. and worldwide patents and patent applications.

3. Defendant Dell Technologies Inc. is a corporation organized under the laws of Delaware, with its principal place of business at One Dell Way, Round Rock, Texas, 78664.

4. Defendant Dell Inc. is a corporation organized under the laws of Delaware, with its principal place of business at One Dell Way, Round Rock, Texas, 78664. On information and belief, Dell Inc. is a wholly-owned subsidiary of Dell Technologies Inc. Dell Inc. is registered to do business in the State of Texas and may be served through its registered agent Corporation Service Company D/B/A+, 211 E. 7th Street, Suite 620, Austin, TX 78701.

BACKGROUND

A. Violin Memory

5. Violin was founded in 2005 by Jon Bennett and Donpaul Stephens to focus on creating all flash storage solutions. Violin raised over \$300 Million in private and public capital and invested it in its R&D and product development. Violin went public in 2013 and was valued at over \$800M. At different times Violin acquired other innovators in the flash storage field, such as Xiotech Corporation and GridIron Systems, along with their key personnel and patents. In 2016, Violin declared bankruptcy and its patent assets were eventually sold.

B. IIM and Dr. Fatih Ozluturk

6. In 2021, IIM purchased Violin’s patent portfolio, which covers data storage systems, including hybrid and all-flash storage arrays, SSDs (solid state storage devices), use of

RAID (redundant array of independent disks) and other architectures in such systems, controllers for managing such systems, cache management, and other related key inventions. IIM's portfolio is significant in scope (299 U.S. and worldwide patents and patent applications) and widely infringed in the marketplace.

7. IIM was founded by Dr. Fatih Ozluturk, a Ph.D. in Electrical Engineering, distinguished engineer, inventor on nearly 450 issued U.S. patents and numerous pending patent applications, making him one of the most prolific patentees living in the United States.

8. Dr. Ozluturk has a history of inventing solutions that have proved to be significant in multiple generations of wireless technologies, including 3G, and 4G LTE, arising primarily out of his work for wireless pioneer InterDigital. Some have remarked that "Fatih's groundbreaking inventions span multiple generations of wireless technology and directly benefit the entire wireless ecosystem and billions of consumers globally." Ex. 1 (<https://www.businesswire.com/news/home/20110418006517/en/%20InterDigital-Honors-Dr.-Fatih-Ozluturk-Inventor-Named>). Dr. Ozluturk also obtained dozens of patents for his inventions related to smartphone cameras, which are now licensed to a great portion of the industry.

9. Dr. Ozluturk is also experienced in patent licensing. For example, Dr. Ozluturk successfully licensed his own digital imaging patents to over 12 of the largest mobile handset and camera companies around the world. He has negotiated and closed more than two dozen licensing deals over the last 3 years for practicing entities that he advises.

C. IIM's Pre-Suit Communications With Dell

10. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents, including but not limited to the '929, '226, '070, and '871 Patents. Ex. 2. IIM explained that its "patent portfolio currently includes nearly 300 US

and foreign patents” and that its “preliminary analysis of Dell Technology Inc.’s (‘Dell’) storage products indicates that Dell needs a license to the [IIM] portfolio as its products practice the patented inventions in the [IIM] portfolio.” *Id.* at 1. IIM noted that its “analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts.” *Id.* at 2. IIM requested that the parties arrange a call to discuss a potential license.

11. On August 15, 2022, Dell confirmed receipt of the August 11 letter. Ex. 3. Dell then requested that the parties hold a call on August 26, 2022. *Id.* The parties held a call on August 26 and Dell indicated additional materials were needed from IIM. Unfortunately, the parties were unable to make further progress on pre-suit licensing discussions.

JURISDICTION AND VENUE

12. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

13. This Court has personal jurisdiction over Defendants in this action because Defendants have committed acts within this District giving rise to this action and have established minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. Defendants, directly and through subsidiaries or intermediaries, have committed and continue to commit acts of infringement in this District by, among other things, making, using, importing, offering to sell, and/or selling products that infringe the Asserted Patents.

14. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b). On information and belief, Defendants have transacted business in this District and have committed

acts of direct infringement in this District by, among other things, making, using, offering to sell, selling, and importing products that infringe the Asserted Patents. For example, Defendants have regular and established places of business in this District, including at One Dell Way, Round Rock, Texas 78682. Defendant Dell Inc. is also registered to do business in the State of Texas.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 8,285,961

15. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

16. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 8,285,961, titled “Dynamic performance virtualization for disk access.” The ’961 Patent was duly and legally issued by the United States Patent and Trademark Office on October 9, 2012. A true and correct copy of the ’961 Patent is attached as Exhibit 4.

17. On information and belief, Dell has and continues to make, use, offer for sale, sell, and/or import certain products and services, including without limitation Dell’s PowerMax (e.g., PowerMax 2000, 2500, 8000, and 8500), VMAX All Flash (e.g., VMAX 250F, 450F, 850F, and 950F), and EMC VMAX (e.g., VMAX 100K, 200K, and 400K) products with “Fully Automated Storage Tiering (FAST)” functionality (“Accused Products”), that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the ’961 Patent. Identification of the Accused Products will be provided in Plaintiff’s infringement contentions disclosed pursuant to the Court’s scheduling order.

18. The Accused Products satisfy all claim limitations of one or more claims of the '961 Patent. A claim chart comparing exemplary independent claim 1 of the '961 Patent to representative Accused Products is attached as Exhibit 5.

19. Dell has notice of the '961 Patent since at least September 3, 2021 through the Patent Office's Final Rejection identifying the application that issued as the '961 Patent as prior art to U.S. Patent App. No. 16/737,360, which issued as 11,461,183 to EMC IP Holding Company LLC (a wholly-owned subsidiary of Dell Technologies Inc.).

20. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents. Ex. 2. IIM noted that its "analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts." *Id.* at 2. On August 15, 2022, Dell confirmed receipt of the August 11, 2022 letter. Ex. 3. Dell and IIM engaged in additional communications thereafter, including holding a call on August 26, 2022. *Id.*

21. Dell knowingly and intentionally induces infringement of one or more claims of the '961 Patent in violation of 35 U.S.C. § 271(b). As of August 11, 2022 (or at least as of the time of the filing and service of this complaint), Dell has knowledge of the '961 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '961 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through online instruction and other online publications cited in Exhibit 5) to use the Accused Products in ways that directly infringe the '961 Patent. For example, Dell advertises that the Accused Products include Fully Automated Storage Tiering (FAST) that allocates data to different storage volumes. See Ex. 6 (<https://www.delltechnologies.com/asset/en-us/products/storage/industry-market/h17108-dell-emc-service-levels-for-powermaxos.pdf>). Dell also instructs its customers

and end users on how to configure and use the Accused Products in an infringing manner, including through the use of Fully Automated Storage Tiering (FAST) functionality. *See, e.g., id.; see also* Ex. 7 (<https://dl.dell.com/content/docu95455>). Dell provides these instructions and materials knowing and intending (or with willful blindness to the fact) that its customers and end users will commit these infringing acts. Dell also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '961 Patent, thereby specifically intending for and inducing its customers to infringe the '961 Patent through the customers' normal and customary use of the Accused Products.

22. Dell has also infringed, and continues to infringe, one or more claims of the '961 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '961 Patent, are especially made or adapted to infringe the '961 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. As of August 11, 2022 (or at least as of the time of filing and service of this complaint), Dell has knowledge of the '961 Patent and the infringing nature of the Accused Products. Dell has been, and currently is, contributorily infringing the '961 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the identified hardware and/or software components and functionality in Dell's PowerMax (*e.g.*, PowerMax 2000, 2500, 8000, and 8500), VMAX All Flash (*e.g.*, VMAX 250F, 450F, 850F, and 950F), and EMC VMAX (*e.g.*, VMAX 100K, 200K, and 400K) products with Fully Automated Storage Tiering (FAST) constitute a material part of the inventions claimed in the '961 Patent, are especially made or adapted to infringe the '961 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited above and in Exhibit 5.

23. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Dell has injured Plaintiff and is liable for infringement of the '961 Patent pursuant to 35 U.S.C. § 271.

24. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. § 287 during the relevant time period because Plaintiff, any predecessor assignees to the '961 Patent, and any licensees did not make, offer for sale, or sell products that practice(d) the '961 Patent during the relevant time period or were not required to mark during the relevant time period.

25. As described above, Dell obtained knowledge of Dell's patent portfolio and that certain Dell products infringe IIM's patents as of at least August 11, 2022, but has not ceased its infringing activities. Dell's infringement of the '961 Patent has been and continues to be willful and deliberate. Dell also has knowledge of the '961 Patent by way of this complaint and, to the extent it does not cease its infringing activities, its infringement is and continues to be willful and deliberate.

26. As a result of Dell's direct and indirect infringement of the '961 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for Dell's infringement, but in no event less than a reasonable royalty for the use made of the invention by Dell, together with interest and costs as fixed by the Court.

COUNT II

INFRINGEMENT OF U.S. PATENT NO. 9,304,714

27. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

28. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 9,304,714, titled “LUN management with distributed RAID controllers.” The ’714 Patent was duly and legally issued by the United States Patent and Trademark Office on April 5, 2016. A true and correct copy of the ’714 Patent is attached as Exhibit 8.

29. On information and belief, Dell has and continues to make, use, offer for sale, sell, and/or import certain products and services, including without limitation Dell’s PowerFlex appliance and rack products (*e.g.*, PowerFlex R660, PowerFlex R760, PowerFlex R650, PowerFlex R750, PowerFlex R640, PowerFlex R740xd, PowerFlex R840) with PowerFlex software (“Accused Products”), that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the ’714 Patent. Identification of the Accused Products will be provided in Plaintiff’s infringement contentions disclosed pursuant to the Court’s scheduling order.

30. The Accused Products satisfy all claim limitations of one or more claims of the ’714 Patent. A claim chart comparing exemplary independent claim 12 of the ’714 Patent to representative Accused Products is attached as Exhibit 9.

31. Dell has notice of the ’714 Patent since at least May 1, 2020 through the Patent Office’s Non-Final Rejection identifying the application that issued as the ’714 Patent as prior art to U.S. Patent App. No. 15/787,154, which issued as 10,852,966 to EMC IP Holding Company LLC (a wholly-owned subsidiary of Dell Technologies Inc.). Dell’s long-standing knowledge of the ’714 Patent is also evidenced by other Dell (or Dell’s subsidiaries’) U.S. and foreign patents that cite to the ’714 Patent and/or the application that issued as the ’714 Patent: U.S. Patent No. 9,256,373 and WO2017116264A1.

32. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents. Ex. 2. IIM noted that its “analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts.” *Id.* at 2. On August 15, 2022, Dell confirmed receipt of the August 11, 2022 letter. Ex. 3. Dell and IIM engaged in additional communications thereafter, including holding a call on August 26, 2022. *Id.*

33. Dell knowingly and intentionally induces infringement of one or more claims of the '714 Patent in violation of 35 U.S.C. § 271(b). As of August 11, 2022 (or at least as of the time of the filing and service of this complaint), Dell has knowledge of the '714 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '714 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through online instruction and other online publications cited in Exhibit 9) to use the Accused Products in ways that directly infringe the '714 Patent. For example, Dell advertises the infringing nature of the Accused Products, such as the PowerFlex products with PowerFlex software-defined storage. Ex. 10 (<https://www.delltechnologies.com/asset/en-us/products/storage/industry-market/h18390-dell-emc-powerflex-networking-best-practices-wp.pdf>); Ex. 11 (<https://dl.dell.com/content/manual43988325-dell-powerflex-appliance-with-powerflex-4-x-architecture-overview.pdf?language=en-us>). Dell also instructs its customers and end users on how to configure and use the Accused Products in an infringing manner, such as the exemplary PowerFlex Appliances with PowerFlex 4.x. Ex. 12 (<https://dl.dell.com/content/manual16676446-dell-powerflex-appliance-with-powerflex-4-x-administration-guide.pdf?language=en-us>). Dell provides these instructions and materials knowing and intending (or with willful blindness to the fact) that its customers and end users will commit these infringing acts. Dell also continues to

make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '714 Patent, thereby specifically intending for and inducing its customers to infringe the '714 Patent through the customers' normal and customary use of the Accused Products.

34. Dell has also infringed, and continues to infringe, one or more claims of the '714 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '714 Patent, are especially made or adapted to infringe the '714 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. As of August 11, 2022 (or at least as of the time of filing and service of this complaint), Dell has knowledge of the '714 Patent and the infringing nature of the Accused Products. Dell has been, and currently is, contributorily infringing the '714 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the identified hardware and/or software components and functionality in Dell's PowerFlex appliance and rack products (*e.g.*, PowerFlex R660, PowerFlex R760, PowerFlex R650, PowerFlex R750, PowerFlex R640, PowerFlex R740xd, PowerFlex R840) with PowerFlex software constitute a material part of the inventions claimed in the '714 Patent, are especially made or adapted to infringe the '714 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited above and in Exhibit 9.

35. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Dell has injured Plaintiff and is liable for infringement of the '714 Patent pursuant to 35 U.S.C. § 271.

36. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. § 287 during the relevant time period because Plaintiff, any predecessor assignees to the '714 Patent, and any licensees did not make, offer for sale, or sell products that

practice(d) the '714 Patent during the relevant time period or were not required to mark during the relevant time period.

37. As described above, Dell obtained knowledge of Dell's patent portfolio and that certain Dell products infringe IIM's patents as of at least August 11, 2022, but has not ceased its infringing activities. Dell's infringement of the '714 Patent has been and continues to be willful and deliberate. Dell also has knowledge of the '714 Patent by way of this complaint and, to the extent it does not cease its infringing activities, its infringement is and continues to be willful and deliberate.

38. As a result of Dell's direct and indirect infringement of the '714 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for Dell's infringement, but in no event less than a reasonable royalty for the use made of the invention by Dell, together with interest and costs as fixed by the Court.

COUNT III

INFRINGEMENT OF U.S. PATENT NO. 8,452,929

39. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

40. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 8,452,929, titled "Method and system for storage of data in non-volatile media." The '929 Patent was duly and legally issued by the United States Patent and Trademark Office on May 28, 2013. A true and correct copy of the '929 Patent is attached as Exhibit 13.

41. On information and belief, Dell has and continues to make, use, offer for sale, sell, and/or import certain products and services, including without limitation Dell's PowerScale All-

flash (*e.g.*, F910, F710, F210, F900, F600, F200 Isilon F800, and Isilon F810), Hybrid (*e.g.*, H7000, and H700), and Archive (*e.g.*, A3000, and A300) products with PowerScale OneFS functionality (“Accused Products”), that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the ’929 Patent. Identification of the Accused Products will be provided in Plaintiff’s infringement contentions disclosed pursuant to the Court’s scheduling order.

42. The Accused Products satisfy all claim limitations of one or more claims of the ’929 Patent. A claim chart comparing exemplary independent claim 35 of the ’929 Patent to representative Accused Products is attached as Exhibit 14.

43. Dell has notice of the ’929 Patent since at least May 26, 2021 through the Patent Office’s Non-Final Rejection identifying ’929 Patent as prior art to U.S. Patent App. No. 16/520,507, which issued as 11,200,122 to EMC IP Holding Company LLC (a wholly-owned subsidiary of Dell Technologies Inc.). Dell’s long-standing knowledge of the ’929 Patent is also evidenced by other Dell (or Dell’s subsidiaries’) U.S. Patents that cite to the ’929 Patent and/or the application that issued as the ’929 Patent: U.S. Patent Nos. 9,372,743, 9,418,100, 10,055,146, and 11,899,630.

44. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents. Ex. 2. For example, the August 11 letter specifically cited the ’929 Patent as a “practiced” patent that required a license. *Id.* The August 11 letter also identified “Dell PowerScale OneFS” as Dell products requiring a license. IIM noted that its “analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts.” *Id.* at 2. On August 15,

2022, Dell confirmed receipt of the August 11, 2022 letter. Ex. 3. Dell and IIM engaged in additional communications thereafter, including holding a call on August 26, 2022. *Id.*

45. Dell knowingly and intentionally induces infringement of one or more claims of the '929 Patent in violation of 35 U.S.C. § 271(b). As of August 11, 2022 (or at least as of the time of the filing and service of this complaint), Dell has knowledge of the '929 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '929 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through online instruction and other online publications cited in Exhibit 14) to use the Accused Products in ways that directly infringe the '929 Patent. For example, Dell advertises the use and benefits of OneFS snapshots and journaling. Ex. 15 (<https://www.delltechnologies.com/asset/en-us/products/storage/industry-market/h10588-wp-powerscale-onefs-data-protection.pdf>); Ex. 16 (<https://www.delltechnologies.com/asset/en-us/products/storage/industry-market/h10719-wp-powerscale-onefs-technical-overview.pdf>). Dell also instructs its customers and end users on how to configure and use the Accused Products in an infringing manner, such as the exemplary PowerScale products and OneFS. *See, e.g., id.; see also* Ex. 17 (<https://www.dell.com/support/kbdoc/en-us/000198853/hardware-powerscale-info-hub>); Ex. 18 (<https://www.dell.com/support/kbdoc/en-us/000183263/onefs-9-1-0-0-documentation-powerscale-info-hub>). Dell provides these instructions and materials knowing and intending (or with willful blindness to the fact) that its customers and end users will commit these infringing acts. Dell also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '929 Patent, thereby specifically intending for and inducing its customers to infringe the '929 Patent through the customers' normal and customary use of the Accused Products.

46. Dell has also infringed, and continues to infringe, one or more claims of the '929 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '929 Patent, are especially made or adapted to infringe the '929 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. As of August 11, 2022 (or at least as of the time of filing and service of this complaint), Dell has knowledge of the '929 Patent and the infringing nature of the Accused Products. Dell has been, and currently is, contributorily infringing the '929 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the identified hardware and/or software components and functionality in Dell's PowerScale products with OneFS software constitute a material part of the inventions claimed in the '929 Patent, are especially made or adapted to infringe the '929 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited above and in Exhibit 14.

47. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Dell has injured Plaintiff and is liable for infringement of the '929 Patent pursuant to 35 U.S.C. § 271.

48. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. § 287 during the relevant time period because Plaintiff, any predecessor assignees to the '929 Patent, and any licensees did not make, offer for sale, or sell products that practice(d) the '929 Patent during the relevant time period or were not required to mark during the relevant time period.

49. As described above, Dell obtained knowledge of Dell's patent portfolio and that certain Dell products infringe IIM's patents as of at least August 11, 2022, but has not ceased its

infringing activities. Dell's infringement of the '929 Patent has been and continues to be willful and deliberate. Dell also has knowledge of the '929 Patent by way of this complaint and, to the extent it does not cease its infringing activities, its infringement is and continues to be willful and deliberate.

50. As a result of Dell's direct and indirect infringement of the '929 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for Dell's infringement, but in no event less than a reasonable royalty for the use made of the invention by Dell, together with interest and costs as fixed by the Court.

COUNT IV

INFRINGEMENT OF U.S. PATENT NO. 7,672,226

51. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

52. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 7,672,226, titled "Method, apparatus and program storage device for verifying existence of a redundant fibre channel path." The '226 Patent was duly and legally issued by the United States Patent and Trademark Office on March 2, 2010. A true and correct copy of the '226 Patent is attached as Exhibit 19.

53. On information and belief, Dell has and continues to make, use, offer for sale, sell, and/or import certain products and services, including without limitation Dell's Unity series of all-flash storage (*e.g.*, Unity 300F, 350F, 400F, 450F, 500F, 550F, 600F, 650F; Unity XT 380F, 480F, 680F, and 880F) and hybrid-flash storage (*e.g.*, Unity 300, 400, 500, 600, 650; Unity XT 380, 480, 680, and 880) arrays with PowerPath functionality ("Accused Products"), that directly infringe,

literally and/or under the doctrine of equivalents, one or more claims of the '226 Patent. Identification of the Accused Products will be provided in Plaintiff's infringement contentions disclosed pursuant to the Court's scheduling order.

54. The Accused Products satisfy all claim limitations of one or more claims of the '226 Patent. A claim chart comparing exemplary independent claim 18 of the '226 Patent to representative Accused Products is attached as Exhibit 20.

55. Dell has notice of the '226 Patent since at least August 14, 2012 when listing the '226 Patent on its Information Disclosure statement to the Patent Office when filing U.S. Patent App. No. 13/465,724, which issued to U.S. Patent No. 9,489,150 to Dell International LLC (a wholly-owned subsidiary of Dell Technologies Inc.). Dell's long-standing knowledge of the '226 Patent is also evidenced by other Dell (or Dell's subsidiaries') U.S. Patents that cite to the '226 Patent and/or the application that issued as the '226 Patent: U.S. Patent No. 7,127,638.

56. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents. Ex. 2. For example, the August 11 letter specifically cited the '226 Patent as a "practiced" patent that required a license. *Id.* IIM noted that its "analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts." *Id.* at 2. On August 15, 2022, Dell confirmed receipt of the August 11, 2022 letter. Ex. 3. Dell and IIM engaged in additional communications thereafter, including holding a call on August 26, 2022. *Id.*

57. Dell knowingly and intentionally induces infringement of one or more claims of the '226 Patent in violation of 35 U.S.C. § 271(b). As of August 11, 2022 (or at least as of the time of the filing and service of this complaint), Dell has knowledge of the '226 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '226 Patent, Dell

continues to actively encourage and instruct its customers and end users (for example, through online instruction and other online publications cited in Exhibit 20) to use the Accused Products in ways that directly infringe the '226 Patent. For example, Dell advertises the use of Fibre Channel connections and storage processors for detecting connection changes. Ex. 21 (https://www.delltechnologies.com/asset/en-us/products/storage/industry-market/h15162-dell_emc_unity-high_availability.pdf); Ex. 22 (https://www.delltechnologies.com/asset/en-us/products/storage/technical-support/h15851-powerpath-ds.pdf?ref=cpcb_dellpowerpathintelligentmultipathingsoftware1_cta_primaryv2_datasheet).

Dell also instructs its customers and end users on how to configure and use the Accused Products in an infringing manner, including the exemplary Dell Unity All-Flash storage arrays. *See, e.g., id.; see also* Ex. 23 (https://www.dell.com/support/manuals/en-us/unity-hybrid/unity_p_380_480_680_880_service_installation_guide/additional-resources). Dell provides these instructions and materials knowing and intending (or with willful blindness to the fact) that its customers and end users will commit these infringing acts. Dell also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '226 Patent, thereby specifically intending for and inducing its customers to infringe the '226 Patent through the customers' normal and customary use of the Accused Products.

58. Dell has also infringed, and continues to infringe, one or more claims of the '226 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '226 Patent, are especially made or adapted to infringe the '226 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. As of August 11, 2022 (or at least as of the time of filing and service of this complaint), Dell has knowledge of the '226 Patent and the

infringing nature of the Accused Products. Dell has been, and currently is, contributorily infringing the '226 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the identified hardware and/or software components and functionality in Dell's Unity series of all-flash storage and hybrid-flash storage arrays with PowerPath functionality constitute a material part of the inventions claimed in the '226 Patent, are especially made or adapted to infringe the '226 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited above and in Exhibit 20.

59. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Dell has injured Plaintiff and is liable for infringement of the '226 Patent pursuant to 35 U.S.C. § 271.

60. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. § 287 during the relevant time period because Plaintiff, any predecessor assignees to the '226 Patent, and any licensees did not make, offer for sale, or sell products that practice(d) the '226 Patent during the relevant time period or were not required to mark during the relevant time period.

61. As described above, Dell obtained knowledge of Dell's patent portfolio and that certain Dell products infringe IIM's patents as of at least August 11, 2022, but has not ceased its infringing activities. Dell's infringement of the '226 Patent has been and continues to be willful and deliberate. Dell also has knowledge of the '226 Patent by way of this complaint and, to the extent it does not cease its infringing activities, its infringement is and continues to be willful and deliberate.

62. As a result of Dell's direct and indirect infringement of the '226 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for

Dell's infringement, but in no event less than a reasonable royalty for the use made of the invention by Dell, together with interest and costs as fixed by the Court.

COUNT V

INFRINGEMENT OF U.S. PATENT NO. 8,160,070

63. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

64. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 8,160,070, titled "Fibre channel proxy." The '070 Patent was duly and legally issued by the United States Patent and Trademark Office on April 17, 2012. A true and correct copy of the '070 Patent is attached as Exhibit 24.

65. On information and belief, Dell has and continues to make, use, offer for sale, sell, and/or import certain products and services, including without limitation Dell's PowerEdge MX Networking Architecture products (*e.g.*, PowerEdge MX7000 Modular Chassis) with "Dell EMC OpenManage Enterprise Modular (OME-Modular)" ("Accused Products"), that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '070 Patent. Identification of the Accused Products will be provided in Plaintiff's infringement contentions disclosed pursuant to the Court's scheduling order.

66. The Accused Products satisfy all claim limitations of one or more claims of the '070 Patent. A claim chart comparing exemplary independent claim 1 of the '070 Patent to representative Accused Products is attached as Exhibit 25.

67. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents. Ex. 2. For example, the August 11 letter

specifically cited the '070 Patent as a “practiced” patent that required a license. *Id.* The August 11 letter also identified the “Dell PowerEdge Servers” as Dell products requiring a license. IIM noted that its “analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts.” *Id.* at 2. On August 15, 2022, Dell confirmed receipt of the August 11, 2022 letter. Ex. 3. Dell and IIM engaged in additional communications thereafter, including holding a call on August 26, 2022. *Id.*

68. Dell knowingly and intentionally induces infringement of one or more claims of the '070 Patent in violation of 35 U.S.C. § 271(b). As of August 11, 2022 (or at least as of the time of the filing and service of this complaint), Dell has knowledge of the '070 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '070 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through online instruction and other online publications cited in Exhibit 25) to use the Accused Products in ways that directly infringe the '070 Patent. For example, Dell advertises that its products support virtual Fibre Channel operations. Ex. 26 (https://dl.dell.com/topicspdf/modularug_en-us.pdf); Ex. 27 (<https://www.dell.com/en-us/shop/ipovw/poweredge-mx7000>). Dell also instructs its customers and end users on how to configure and use the Accused Products in an infringing manner, including the exemplary PowerEdge MX7000 Modular. *See, e.g., id.*; Ex. 28 (<https://infohub.delltechnologies.com/en-us/t/dell-poweredge-mx-networking-deployment-guide-1/>). Dell provides these instructions and materials knowing and intending (or with willful blindness to the fact) that its customers and end users will commit these infringing acts. Dell also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '070 Patent, thereby specifically intending for and inducing its customers to

infringe the '070 Patent through the customers' normal and customary use of the Accused Products.

69. Dell has also infringed, and continues to infringe, one or more claims of the '070 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '070 Patent, are especially made or adapted to infringe the '070 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. As of August 11, 2022 (or at least as of the time of filing and service of this complaint), Dell has knowledge of the '070 Patent and the infringing nature of the Accused Products. Dell has been, and currently is, contributorily infringing the '070 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the identified hardware and/or software components and functionality in Dell's PowerEdge MX7000 products with "Dell EMC OpenManage Enterprise Modular (OME-Modular)" constitute a material part of the inventions claimed in the '070 Patent, are especially made or adapted to infringe the '070 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited above and in Exhibit 25.

70. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Dell has injured Plaintiff and is liable for infringement of the '070 Patent pursuant to 35 U.S.C. § 271.

71. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. § 287 during the relevant time period because Plaintiff, any predecessor assignees to the '070 Patent, and any licensees did not make, offer for sale, or sell products that practice(d) the '070 Patent during the relevant time period or were not required to mark during the relevant time period.

72. As described above, Dell obtained knowledge of Dell's patent portfolio and that certain Dell products infringe IIM's patents as of at least August 11, 2022, but has not ceased its infringing activities. Dell's infringement of the '070 Patent has been and continues to be willful and deliberate. Dell also has knowledge of the '070 Patent by way of this complaint and, to the extent it does not cease its infringing activities, its infringement is and continues to be willful and deliberate.

73. As a result of Dell's direct and indirect infringement of the '070 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for Dell's infringement, but in no event less than a reasonable royalty for the use made of the invention by Dell, together with interest and costs as fixed by the Court.

COUNT VI

INFRINGEMENT OF U.S. PATENT NO. 8,417,871

74. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

75. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 8,417,871, titled "System for increasing storage media performance." The '871 Patent was duly and legally issued by the United States Patent and Trademark Office on April 9, 2013. A true and correct copy of the '871 Patent is attached as Exhibit 29.

76. On information and belief, Dell has and continues to make, use, offer for sale, sell, and/or import certain products and services, including without limitation Dell's PowerMax (*e.g.*, PowerMax 2000, 2500, 8000, and 8500), VMAX All Flash (*e.g.*, VMAX 250F, 450F, 850F, and 950F), and EMC VMAX (*e.g.*, VMAX 100K, 200K, and 400K) ("Accused Products"), that

directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '871 Patent. Identification of the Accused Products will be provided in Plaintiff's infringement contentions disclosed pursuant to the Court's scheduling order.

77. The Accused Products satisfy all claim limitations of one or more claims of the '871 Patent. A claim chart comparing exemplary independent claim 13 of the '871 Patent to representative Accused Products is attached as Exhibit 30.

78. Dell has notice of the '871 Patent since at least March 24, 2022 through the Patent Office's Non-Final Rejection identifying the '871 Patent as prior art to U.S. Patent App. No. 17/239,176, which issued to U.S. Patent No. 11,500,579 to EMC IP Holding Company, LLC (a wholly-owned subsidiary of Dell Technologies Inc.).

79. On August 11, 2022, IIM sent Dell a letter indicating that certain Dell products needed a license to practice certain IIM patents. Ex. 2. For example, the August 11 letter specifically cited the '871 Patent as a "practiced" patent that required a license. *Id.* IIM noted that its "analysis is continuing, and additional Dell products and product lines may need a license to the above US patents, additional US patents, and foreign counterparts." *Id.* at 2. On August 15, 2022, Dell confirmed receipt of the August 11, 2022 letter. Ex. 3. Dell and IIM engaged in additional communications thereafter, including holding a call on August 26, 2022. *Id.*

80. Dell knowingly and intentionally induces infringement of one or more claims of the '871 Patent in violation of 35 U.S.C. § 271(b). As of August 11, 2022 (or at least as of the time of the filing and service of this complaint), Dell has knowledge of the '871 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '871 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through online instruction and other online publications cited in Exhibit 30) to use the Accused Products

in ways that directly infringe the '871 Patent. For example, Dell advertises and promotes that the Accused Products (such as the PowerMax products) utilize Symmetrix Remote Data Facility (SRDF) and the impact on I/O read and write operations, as well as the use of Service Levels for storage tiers. *See* Ex. 31 (https://infohub.delltechnologies.com/static/media/client/7phukh/DAM_0c3081d3-97e6-4256-af4e-7d9cc6636cc3.pdf); *Ex.* 32 (https://infohub.delltechnologies.com/static/media/client/7phukh/DAM_e1c3888b-8c29-458e-abe5-f2c91c0a875d.pdf). Dell also instructs its customers and end users on how to configure and use the Accused Products in an infringing manner, including through the use of Service Levels for storage tiers. *See, e.g., id.; see also* Ex. 33 (<https://infohub.delltechnologies.com/en-us/section-assets/h17108-dell-emc-service-levels-for-powermaxos/>). Dell provides these instructions and materials knowing and intending (or with willful blindness to the fact) that its customers and end users will commit these infringing acts. Dell also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '871 Patent, thereby specifically intending for and inducing its customers to infringe the '871 Patent through the customers' normal and customary use of the Accused Products.

81. Dell has also infringed, and continues to infringe, one or more claims of the '871 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '871 Patent, are especially made or adapted to infringe the '871 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. As of August 11, 2022 (or at least as of the time of filing and service of this complaint), Dell has knowledge of the '871 Patent and the infringing nature of the Accused Products. Dell has been, and currently is, contributorily

infringing the '871 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the identified hardware and/or software components and functionality in Dell's PowerMax (*e.g.*, PowerMax 2000, 2500, 8000, and 8500), VMAX All Flash (*e.g.*, VMAX 250F, 450F, 850F, and 950F), and EMC VMAX (*e.g.*, VMAX 100K, 200K, and 400K) products constitute a material part of the inventions claimed in the '871 Patent, are especially made or adapted to infringe the '871 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited above and in Exhibit 30.

82. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Dell has injured Plaintiff and is liable for infringement of the '871 Patent pursuant to 35 U.S.C. § 271.

83. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. § 287 during the relevant time period because Plaintiff, any predecessor assignees to the '871 Patent, and any licensees did not make, offer for sale, or sell products that practice(d) the '871 Patent during the relevant time period or were not required to mark during the relevant time period.

84. As described above, Dell obtained knowledge of Dell's patent portfolio and that certain Dell products infringe IIM's patents as of at least August 11, 2022, but has not ceased its infringing activities. Dell's infringement of the '871 Patent has been and continues to be willful and deliberate. Dell also has knowledge of the '871 Patent by way of this complaint and, to the extent it does not cease its infringing activities, its infringement is and continues to be willful and deliberate.

85. As a result of Dell's direct and indirect infringement of the '871 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for

Dell's infringement, but in no event less than a reasonable royalty for the use made of the invention by Dell, together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

a. A judgment in favor of Plaintiff that Dell has infringed, either literally and/or under the doctrine of equivalents, the '961, '714, '929, '226, '070, and '871 Patents;

b. A judgment and order requiring Dell to pay Plaintiff its damages (past, present, and future), costs, expenses, and pre-judgment and post-judgment interest for Dell's infringement of the '961, '714, '929, '226, '070, and '871 Patents;

c. A judgment that Dell's infringement of the '961, '714, '929, '226, '070, and '871 Patents has been willful and order requiring Dell to pay treble damages for willful infringement;

d. A judgment and order requiring Dell to pay Plaintiff compulsory ongoing licensing fees, as determined by the Court;

e. A judgment and order requiring Dell to provide an accounting and to pay supplemental damages to Plaintiff, including without limitation, pre-judgment and post-judgment interest and compensation for infringing products released after the filing of this case that are not colorably different from the Accused Products;

f. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Dell; and

g. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: May 31, 2024

Respectfully submitted,

/s/ Brett E. Cooper

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