

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

**INTELLECTUAL VENTURES I, LLC;  
INTELLECTUAL VENTURES II, LLC**

**Plaintiffs,**

**v.**

**NETAPP, INC.**

**Defendant.**

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

**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 Plaintiffs Intellectual Ventures LLC I (“IV I”) and Intellectual Ventures LLC II (“IV II”) (collectively “IV” or “Plaintiff”) makes the following allegations against Defendant NetApp, Inc. (“Defendant”).

**PARTIES**

1. IV I and IV II are Washington limited liability companies, and have a place of business at 3150 139th Ave SE, Building 4, Bellevue, Washington 98005.

2. On information and belief, NetApp is a Delaware corporation with its principal place of business at 495 East Java Drive, Sunnyvale, CA 94089. NetApp, Inc. can be served through its registered agent, Corporate Service Company, 2711 Centerville Road, Suite 400, Wilmington, DE 19808.

**JURISDICTION AND VENUE**

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

4. This Court has personal jurisdiction over Defendant in this action because, among other reasons, Defendant has committed acts within the District of Massachusetts giving rise to

this action and has established minimum contacts with the forum state of Massachusetts.

Defendant maintains a place of business within the state at Reservoir Place, South Building 1601 Trapelo Road, Suite 16, Waltham, MA 02451. Defendant, directly and/or through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in this District by, among other things, making, using, importing, offering for sale, and/or selling products and/or services that infringe the patents-in-suit. Thus, Defendant purposefully availed itself of the benefits of doing business in the Commonwealth of Massachusetts and the exercise of jurisdiction over Defendant would not offend traditional notions of fair play and substantial justice. Defendant is registered to do business in the Commonwealth of Massachusetts, and has appointed Corporate Service Company, 2711 Centerville Road, Suite 400, Wilmington, DE 19808 as its agent for service of process.

5. Venue is proper in this District under 28 U.S.C. §§ 1391 (b)-(c) and 1400(b) because Defendant is subject to personal jurisdiction in this District, has transacted business in this District and has committed acts of patent infringement in this District.

### **BACKGROUND**

6. Intellectual Ventures I and II are part of a broader Intellectual Ventures organization that was founded in 2000 on the fundamental premise that inventions are valuable. Since its founding, IV has built on this premise by working to ensure that a market for invention continues to thrive. IV has been deeply involved in the business of invention by creating and filing patent applications covering its own inventions, and collaborating with others to develop and patent inventions. IV also acquires and licenses patents from individual inventors, universities and other institutions. A significant aspect of IV's business is managing the plaintiffs in this case.

7. IV's business includes purchasing important inventions from individual inventors and institutions and then licensing the inventions to those who need them. Through this business, IV allows inventors to reap a financial reward from their innovations, which is frequently difficult for individual inventors to do. To date, IV has acquired more than 70,000

assets and, in the process, has paid individual inventors hundreds of millions of dollars for their inventions. IV, in turn, has earned more than \$3 billion by licensing these patents to some of the world's most innovative and successful technology companies, which continue to use them to make computer equipment, software, semiconductor devices, and a host of other products.

8. IV also creates inventions. IV has a staff of scientists and engineers who develop ideas in a broad range of fields, including agriculture, computer hardware, life sciences, medical devices, semiconductors, and software. IV has invested millions of dollars developing such inventions and has filed hundreds of patent applications on its inventions every year, making it one of the top patent filers in the world. IV has also invested in laboratory facilities to assist with the development and testing of new inventions.

9. This cause of action asserts infringement of patents that IV acquired as part of its effort to create an efficient market for inventions, and involves the patents described below and attached to this complaint as Exhibits A-E (collectively, "Asserted Patents").

10. IV II is the owner by assignment of United States Patent No. 6,516,442 ("the '442 Patent") entitled "Channel interface and protocols for cache coherency in a scalable symmetric multiprocessor system." The '442 Patent was duly and legally issued by the United States Patent and Trademark Office on February 4, 2003. A true and correct copy of the '442 Patent is included as Exhibit A.

11. IV I is the owner by assignment of United States Patent No. 6,775,745 ("the '745 Patent") entitled "Method and apparatus for hybrid data caching system." The '745 Patent was duly and legally issued by the United States Patent and Trademark Office on August 10, 2004. A true and correct copy of the '745 Patent is included as Exhibit B.

12. IV II is the owner by assignment of United States Patent No. 6,968,459 ("the '459 Patent") entitled "Computing environment having secure storage device." The '459 Patent was duly and legally issued by the United States Patent and Trademark Office on November 22, 2005. A true and correct copy of the '459 Patent is included as Exhibit C.

13. IV I is the owner by assignment of United States Patent No. 8,275,827 (“the ’827 Patent”) entitled “Software-based network attached storage services hosted on massively distributed parallel computing networks.” The ’827 Patent was duly and legally issued by the United States Patent and Trademark Office on September 25, 2012. A true and correct copy of the ’827 Patent is included as Exhibit D.

14. IV II is the owner by assignment of United States Patent No. 6,633,945 (“the ’945 Patent”) entitled “Fully connected cache coherent multiprocessing systems.” The ’945 Patent was duly and legally issued by the United States Patent and Trademark Office on October 14, 2003. A true and correct copy of the ’945 Patent is included as Exhibit E.

### COUNT I

#### INFRINGEMENT OF THE ’442 PATENT

15. IV incorporates by reference paragraphs 1 through 14 of this Complaint.

16. On information and belief, Defendant makes, uses, offers for sale and/or sells in the United States products and/or services that infringe various claims of the ’442 Patent, and continues to do so. By way of illustrative example, Defendant’s infringing products include without limitation, all versions and variations of NetApp’s FAS series products.<sup>1</sup> Defendant’s infringing products are referred to hereinafter as “the ’442 Accused Instrumentalities.”

17. On information and belief, the ’442 Accused Instrumentalities are shared-memory multiprocessor systems comprising a switch fabric configured to switch packets containing data.<sup>2</sup>

18. On information and belief, the ’442 Accused Instrumentalities comprise a plurality of channels configured to transfer packets.

19. On information and belief, the ’442 Accused Instrumentalities comprise a plurality of switch interfaces configured to exchange the packets with the switch fabric,

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<sup>1</sup> See, e.g., <http://www.netapp.com/us/products/storage-systems/fas8000/>.

<sup>2</sup> See generally, e.g., <http://www.netapp.com/us/media/ds-3546.pdf>. (“The FAS8000 features a **multiprocessor** ... chip set and leverages high-performance memory modules”) (emphasis added).

exchange the packets over channels, and perform error correction of the data in the packets exchanged over the channels.

20. On information and belief, the '442 Accused Instrumentalities comprise a plurality of microprocessor interfaces configured to exchange the data with a plurality of microprocessors, exchange the packets with the switch interfaces over the channels, and perform error correction of the packets exchanged over the channels.

21. On information and belief, the '442 Accused Instrumentalities comprise a memory interface configured to exchange the data with a memory device, exchange the packets with the switch interfaces over the channels, and perform error correction of the data in the packets exchanged over the channels.

22. On information and belief, Defendant has directly infringed and continues to directly infringe the '442 Patent by, among other things, making, using, offering for sale, and/or selling the '442 Accused Instrumentalities. On information and belief, such products and/or services are covered by one or more claims of the '442 Patent including at least claim 1.

23. By making, using, offering for sale, and/or selling the '442 Accused Instrumentalities infringing the '442 Patent, Defendant has injured IV and is liable to IV for infringement of the '442 Patent pursuant to 35 U.S.C. § 271.

24. To the extent facts learned in discovery show that Defendant's infringement of the '442 Patent is or has been willful, IV reserves the right to request such a finding at time of trial.

25. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '442 Patent.

26. As a result of Defendant's infringement of the '442 Patent, IV has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and IV will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

27. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '442 Patent, IV will be greatly and irreparably harmed.

## COUNT II

### INFRINGEMENT OF THE '745 PATENT

28. IV references and incorporates by reference paragraphs 1 through 27 of this Complaint.

29. On information and belief, Defendant makes, uses, offers for sale and/or sells in the United States products and/or services that infringe various claims of the '745 Patent, and continues to do so. By way of illustrative example, Defendant's infringing products include without limitation, all versions and variations of NetApp's FlashPool technology, and all products that utilize it, including without limitation FAS, E-, and DS series products.<sup>3</sup> Defendant's infringing products are referred to collectively hereinafter as "the '745 Accused Instrumentalities."

30. On information and belief, the '745 Accused Instrumentalities perform a caching method for enhancing system performance for a computer.<sup>4</sup>

31. On information and belief, the '745 Accused Instrumentalities read an extended segment of data in response to a request from an operating system.

32. On information and belief, the '745 Accused Instrumentalities store copies of associated with the extended segment in a cache.

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<sup>3</sup> See, generally e.g., <http://www.netapp.com/ca/products/platform-os/flashpool.aspx>; <http://www.netapp.com/ca/media/ds-3345.pdf>.

<sup>4</sup> See, e.g., *id.* ("Enable automated storage tiering by using NetApp® Flash Pool™ intelligent **caching**, an integral component of the NetApp® Virtual Storage Tier.") (emphasis added).

33. On information and belief, the '745 Accused Instrumentalities assign frequency factors to each of the files stored in the cache, the frequency factor indicating how often each of the corresponding files are requested by the operating system.<sup>5</sup>

34. On information and belief, the '745 Accused Instrumentalities scan the frequency factors, the scanning being performed in response to a target capacity of the cache being attained.

35. On information and belief, the '745 Accused Instrumentalities identify a least frequently and least recently used file.

36. On information and belief, the '745 Accused Instrumentalities eliminate the least frequently and least recently used file to liberate capacity of the cache.

37. On information and belief, Defendant has directly infringed and continues to directly infringe the '745 Patent by, among other things, making, using, offering for sale, and/or selling the '745 Accused Instrumentalities. On information and belief, such products and/or services are covered by one or more claims of the '745 Patent including at least claim 4.

38. By making, using, offering for sale, and/or selling the '745 Accused Instrumentalities infringing the '745 Patent, Defendant has injured IV and is liable to IV for infringement of the '745 Patent pursuant to 35 U.S.C. § 271.

39. To the extent facts learned in discovery show that Defendant's infringement of the '745 Patent is or has been willful, IV reserves the right to request such a finding at time of trial.

40. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '745 Patent.

41. As a result of Defendant's infringement of the '745 Patent, IV has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together

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<sup>5</sup> See, e.g., <http://www.netapp.com/ca/media/ds-3345.pdf> (“[E]nterprise workloads have a small subset of the overall dataset that accounts for most of the performance needs of the workload. This subset is called the working set, active data, or hot data.”) (internal quotation marks omitted).

with interest and costs as fixed by the Court, and IV will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

42. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '745 Patent, IV will be greatly and irreparably harmed.

### **COUNT III**

#### **INFRINGEMENT OF THE '459 PATENT**

43. IV references and incorporates by reference paragraphs 1 through 42 of this Complaint.

44. On information and belief, Defendant makes, uses, offers for sale and/or sells in the United States products and/or services that infringe various claims of the '459 Patent, and continues to do so. By way of illustrative example, Defendant's infringing products include without limitation all versions and variations of NetApp's Storage Encryption, and all NetApp products that utilize it.<sup>6</sup> Defendant's infringing products are referred to collectively hereinafter as "the '459 Accused Instrumentalities."

45. On information and belief, the '459 Accused Instrumentalities perform a method of sensing whether a storage device has device-specific security information stored thereon.

46. On information and belief, the '459 Accused Instrumentalities operate in a full-access mode when the storage device has the device-specific security information.

47. On information and belief, the '459 Accused Instrumentalities operate in a restricted-access mode when the storage device does not have the device-specific security information.

48. On information and belief, Defendant has directly infringed and continues to directly infringe the '459 Patent by, among other things, making, using, offering for sale, and/or selling the '459 Accused Instrumentalities. On information and belief, such products and/or

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<sup>6</sup> See, generally e.g., <http://www.netapp.com/us/products/storage-security-systems/netapp-storage-encryption.aspx>.



services are covered by one or more claims of the '459 Patent including at least claims 18 and 39.

49. By making, using, offering for sale, and/or selling the '459 Accused Instrumentalities infringing the '459 Patent, Defendant has injured IV and is liable to IV for infringement of the '459 Patent pursuant to 35 U.S.C. § 271.

50. To the extent facts learned in discovery show that Defendant's infringement of the '459 Patent is or has been willful, IV reserves the right to request such a finding at time of trial.

51. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '459 Patent.

52. As a result of Defendant's infringement of the '459 Patent, IV has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and IV will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

53. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '459 Patent, IV will be greatly and irreparably harmed.

#### **COUNT IV**

#### **INFRINGEMENT OF THE '827 PATENT**

54. IV references and incorporates by reference paragraphs 1 through 53 of this Complaint.

55. On information and belief, Defendant makes, uses, offers for sale and/or sells in the United States products and/or services that infringe various claims of the '827 Patent, and continues to do so. By way of illustrative example, Defendant's infringing products include without limitation all versions and variations of its FAS and E-series products.<sup>7</sup> Defendant's

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<sup>7</sup> See, e.g., <http://www.netapp.com/us/media/ds-3582.pdf>;  
<http://www.netapp.com/us/products/storage-systems/e5500/index.aspx>.

infringing products are referred to collectively hereinafter as “the ’827 Accused Instrumentalities.”

56. On information and belief, the ’827 Accused Instrumentalities configure a distributed processing system comprising several distributed devices coupled to a network, wherein these several distributed devices include respective client agents configured to process respective portions of a workload for the distributed processing system, wherein the respective client agents for particular distributed devices of these several distributed devices have corresponding software-based network attached storage (NAS) components configured to assess unused or under-utilized storage resources in selected distributed devices of the plurality of distributed devices.

57. On information and belief, the ’827 Accused Instrumentalities represent with a corresponding software-based NAS component that the selected distributed devices respectively comprise NAS devices having an available amount of storage resources related to the unused and under-utilized storage resources for the selected distributed devices.

58. On information and belief, the ’827 Accused Instrumentalities process one or more of data storage or access workloads for the distributed processing system by accessing data from or storing data to at least a portion of the available amount of storage resources to provide NAS service to a client device coupled to the network.

59. On information and belief, the ’827 Accused Instrumentalities enable at least one of the selected distributed devices to function as a location distributed device to store location information associated with data stored by the selected distributed devices through use of the respective client agents for the particular distributed device.

60. On information and belief, Defendant has directly infringed and continues to directly infringe the ’827 Patent by, among other things, making, using, offering for sale, and/or selling the ’827 Accused Instrumentalities. On information and belief, such products and/or services are covered by one or more claims of the ’827 Patent including at least claims 1 and 13.

61. By making, using, offering for sale, and/or selling the '827 Accused Instrumentalities infringing the '827 Patent, Defendant has injured IV and is liable to IV for infringement of the '827 Patent pursuant to 35 U.S.C. § 271.

62. To the extent facts learned in discovery show that Defendant's infringement of the '827 Patent is or has been willful, IV reserves the right to request such a finding at time of trial.

63. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '827 Patent.

64. As a result of Defendant's infringement of the '827 Patent, IV has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and IV will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

65. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '827 Patent, IV will be greatly and irreparably harmed.

## COUNT V

### INFRINGEMENT OF THE '945 PATENT

66. IV references and incorporates by reference paragraphs 1 through 65 of this Complaint.

67. On information and belief, Defendant makes, uses, offers for sale and/or sells in the United States products and/or services that infringe various claims of the '945 Patent, and continue to do so. By way of illustrative example, Defendant's infringing products include without limitation all versions and variations of NetApp's Metrocluster technology, and all products that utilize it.<sup>8</sup> Defendant's infringing products are referred to collectively hereinafter as "the '945 Accused Instrumentalities."

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<sup>8</sup> See, e.g., <http://www.netapp.com/us/media/tr-3548.pdf>.

68. On information and belief, the '945 Accused Instrumentalities are multi-processor shared memory systems.

69. On information and belief, the '945 Accused Instrumentalities comprise a first set of point-to-point connections, with a first set of processors and a first memory coupled to that first set of connections, and a flow control unit that includes a first data switch coupled to the first set of point-to-point connections wherein that data switch is configured to interconnect the first set of point-to-point connections to provide data paths between the first coupled memory and the first set of coupled processors.

70. On information and belief, the '945 Accused Instrumentalities comprise a second set of point-to-point connections, with a second set of processors and a second memory coupled to that second set of connections, and a flow control unit that includes a second data switch coupled to the second set of point-to-point connections wherein that data switch is configured to interconnect the second set of point-to-point connections to provide data paths between the second coupled memory and the second set of coupled processors.

71. On information and belief, the '945 Accused Instrumentalities comprise a third point-to-point connection coupled to the first data switch and to the second data switch wherein the first data switch is configured to interconnect the first set of point-to-point connections to the third point-to-point connection and the second data switch is configured to interconnect the second set of point-to-point connections to the third point-to-point connection to provide third data paths between the second memory and the first set of processors and between the first memory and the second set of processors.

72. On information and belief, Defendant has directly infringed and continues to directly infringe the '945 Patent by, among other things, making, using, offering for sale, and/or selling the '945 Accused Instrumentalities. On information and belief, such products and/or services are covered by one or more claims of the '945 Patent including at least claim 1.

73. By making, using, offering for sale, and/or selling the '945 Accused Instrumentalities infringing the '945 Patent, Defendant has injured IV and is liable to IV for infringement of the '945 Patent pursuant to 35 U.S.C. § 271.

74. To the extent facts learned in discovery show that Defendant's infringement of the '945 Patent is or has been willful, IV reserves the right to request such a finding at time of trial.

75. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '945 Patent.

76. As a result of Defendant's infringement of the '945 Patent, IV has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and IV will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

77. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '945 Patent, IV will be greatly and irreparably harmed.

#### **PRAYER FOR RELIEF**

Plaintiff respectfully requests the following relief from this Court:

A. A judgment that Defendant has infringed one or more claims of the '442, '745, '459, '827, and/or '945 Patents;

B. A permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert or participation with Defendant, from infringing the '442, '745, '459, '827, and/or '945 Patents;

C. A judgment and order requiring Defendant to pay IV its damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's acts of infringement in accordance with 35 U.S.C. § 284;

D. A judgment and order requiring Defendant to provide accountings and to pay supplemental damages to IV, including, without limitation, prejudgment and post-judgment interest;

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

F. Any and all other relief to which IV may show itself to be entitled.

**JURY TRIAL DEMANDED**

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

DATED: May 11, 2016

Respectfully submitted,

INTELLECTUAL VENTURES I, LLC and  
INTELLECTUAL VENTURES II, LLC,  
By their attorneys,

/s/ David S. Godkin

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