

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

LONGHORN HD LLC.,	§	
	§	
Plaintiff,	§	Case No.
	§	
v.	§	<b>JURY TRIAL DEMANDED</b>
	§	
FUJITSU LTD. and FUJITSU AMERICA, INC.,	§	
	§	
Defendants.	§	

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Longhorn HD LLC. (“LHD” or “Plaintiff”), for its Complaint against Defendants Fujitsu Ltd. and Fujitsu America, Inc. (collectively, “Fujitsu” or “Defendants”) alleges as follows:

**THE PARTIES**

1. LHD is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 102 E. Crockett Street, Marshall, Texas 75670.

2. Upon information and belief, Defendant Fujitsu Ltd. is a corporation organized and existing under the laws of Japan, with its principal place of business located at Shidome City Center 1-5-2 Higashi-Shimbashi, Minato-ku Tokyo 105-7123, Japan, and may be served pursuant to the provisions of the Hague Convention. Upon information and belief, Defendant Fujitsu America, Inc. is a California corporation with a regular and established place of business in Colin County, Texas at 2791 Telecom Parkway, Richardson, Texas 75082. Fujitsu is a leading manufacturer and seller of computers and server equipment throughout the world and in

the United States. Upon information and belief, Fujitsu does business in Texas and in the Eastern District of Texas, directly or through intermediaries.

### **JURISDICTION**

3. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.* This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has personal jurisdiction over Defendants. Defendants regularly conduct business and have committed acts of patent infringement and/or has induced acts of patent infringement by others in this Judicial District and/or has contributed to patent infringement by others in this Judicial District, the State of Texas, and elsewhere in the United States.

5. Venue is proper in this Judicial District pursuant to 28 U.S.C. § 1391 and 1400(b). Defendant Fujitsu Ltd. is a defendant not resident in the United States, and thus may be sued in any judicial district pursuant to 28 U.S.C. § 1391(c)(3). Upon information and belief, Defendant Fujitsu America, Inc. maintains a regular and established place of business at 2791 Telecom Parkway, Richardson, Texas 75082 in Colin County within this Judicial District. Additionally, upon information and belief, Fujitsu also maintains a facility at 2801 Telecom Parkway, Richardson, Texas 75082 also within this Judicial District. Upon information and belief, Defendants have committed the acts of infringement alleged herein within this Judicial District.

6. Defendants are subject to this Court's jurisdiction pursuant to due process and/or the Texas Long Arm Statute due at least to their substantial business in this State and Judicial District, including (a) at least part of its past infringing activities, (b) regularly doing or soliciting

business in Texas, and/or (c) engaging in persistent conduct and/or deriving substantial revenue from goods and services provided to customers in Texas.

**PATENTS-IN-SUIT**

7. On May 22, 2001, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,237,112 (the “’112 Patent”) entitled “SCSI Device Available for Breakdown Prediction and Self-Examination and a Method Thereof.” A true and correct copy of the ’112 Patent is available at: <http://pdfpiw.uspto.gov/.piw?PageNum=0&docid=06237112>.

8. On May 22, 2004, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,734,597 (the “’597 Patent”) entitled “Thermomechanical In-Plane Microactuator.” A true and correct copy of the ’597 Patent is available at: <http://pdfpiw.uspto.gov/.piw?Docid=06734597>.

9. On April 15, 2003, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,549,400 (the “’400 Patent”) entitled “Method and System for Quickly Connecting a 1U Personal Computer.” A true and correct copy of the ’400 Patent is available at: <http://pdfpiw.uspto.gov/.piw?Docid=06549400>.

10. On March 24, 2004, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,711,012 (the “’012 Patent”) entitled “Method and System for Quickly Connecting a 1U Personal Computer.” A true and correct copy of the ’012 Patent is available at: <http://pdfpiw.uspto.gov/.piw?Docid=06711012>.

11. On August 30, 2005, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,937,104 (the “’104 Patent”) entitled “Removable Hard Drive Assembly, Computer with a Removable Hard Disk Drive, Method of Initializing and Operating a Removable Hard Drive.” A true and correct copy of the ’104 Patent is available at:

<http://pdfpiw.uspto.gov/.piw?Docid=06938104>.

12. On January 8, 2008, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,318,170 (the “’170 Patent”) entitled “Protection of Non-Volatile Memory Component Against Data Corruption Due to Physical Shock.” A true and correct copy of the ’170 Patent is available at: <http://pdfpiw.uspto.gov/.piw?Docid=07318170>.

13. On September 6, 2011, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,015,444 (the “’444 Patent”) entitled “Protection of Non-Volatile Memory Component Against Data Corruption.” A true and correct copy of the ’444 Patent is available at: <http://pdfpiw.uspto.gov/.piw?Docid=08015444>.

14. LHD is the sole and exclusive owner of all right, title, and interest in the ’112 Patent, the ’597 Patent, the ’400 Patent, the ’012 Patent, the ’104 Patent, the ’170 Patent, and the ’444 Patent (collectively, the “Patents-in-Suit”), and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this patent infringement lawsuit. LHD also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit and to seek injunctive relief as appropriate under the law.

15. LHD has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patents-in-Suit. On information and belief, prior assignees and licensees have also complied with the marking provisions of 35 U.S.C. § 287.

### **FACTUAL ALLEGATIONS**

16. The Patents-in-Suit generally cover systems and methods for use in computer and server storage and structure.

17. The ’112 Patent generally relates to technology for breakdown prediction and self-examination of computer peripherals, such as computer and server disk drives. The

technology described by the '112 Patent was developed by inventors Seung-Wha Yoo, In-Ho Lee, Hyung-Sun Kim, Moon-Young Lee, and Chan-soo Kim at Samsung in Korea. For example, this technology is implemented today in Self-Monitoring Analysis and Report Technology (SMART) functionality included in hard disk drives. Infringing SMART enabled hard disk drives to include the ability to monitor status including temperature, motor, and power status, among other features.

18. The '597 Patent generally relates to technology for utilizing miniature piezoelectric elements to move shuttles in a direction perpendicular to the piezoelectric element. The technology described in the '597 Patent was developed by inventors Larry Howell and Scott Lyon at Brigham Young University. For example, this technology is implemented at least in hard disk drives as technology referred to as “micro-actuators” and/or “dual-stage actuators.”

19. Third parties Western Digital (“WD”) and Hitachi Global Storage Technologies (“HGST”) supply Hard Disk Drives (“HDDs”) that implement the infringing SMART and micro-actuator technologies. These hard drives include WD Blue, Black, Red, Purple, and Gold drives, as well as HGST Ultrastar, Travelstar, Deskstar, Endurastar, and Cinemastar drives. Fujitsu makes, uses, sells, and/or imports computers, such as desktops, laptops, tablets, and servers, that include one or more WD and/or HGST HDDs. For example, upon information and belief, these infringing computers include the Fujitsu Lifebook, Esprimo, Celsius, Primergy, and Eternus computers and servers which include one or more WD and/or HGST HDDs.

20. The '400 and '012 Patents generally relate to novel structures for connecting 1U computers. The technology described in the '400 and '012 Patents was developed by David T. Medin, Scott Kayser, Robert D. Hinds, and Curtis R. Nelson at Crystal Group Inc. Upon information and belief, Crystal Group made ruggedized servers for military and maritime use.

For example, the technology is implemented by infringing servers that utilize blind mateable configurations. Upon information and belief, Fujitsu makes, uses, sells, and/or imports infringing servers, such as the Primergy BX9000 server and BX960 server blades. Upon information and belief, these infringing Fujitsu server products further include management modules that provide remote management capabilities.

21. The '104 Patent generally relates to hot-swappable ATA hard disk drives. The technology described in the '104 Patent was developed by Itzik Levy at Arco Computer Products, Inc. For example, the technology is implemented by infringing servers that utilize hot-swappable hard disk drives and solid state drives. Upon information and belief, Fujitsu makes, uses, sells, and/or imports infringing servers, such as the Primergy BX9000 server and BX960 server blades and the Eternus server. Upon information and belief, these infringing Fujitsu server products further include hot-swappable hard drive modules that are configured with Redundant Array of Multiple Disks ("RAID").

22. The '170 and '444 Patents generally relate to novel systems and methods for protecting non-volatile memory from errors caused by falls. The technology described in the '170 and '444 Patents was developed by Jakke Makela and Marko Ahvenainen at Spyder Navigations L.L.C. Upon information and belief, Fujitsu makes, uses, sells, and/or imports infringing computers, such as the Fujitsu Lifebook. Upon information and belief, these infringing Fujitsu Lifebook products include fall sensors that detect falling conditions and cease write operations to prevent damage or data loss.

23. Fujitsu has infringed and is continuing to infringe the Patents-in-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or import, products including desktop computers, laptop computers, and

servers that utilize hard disk drives (“HDDs”), solid state drives (“SSDs”), and associated software that infringe the Patents-in-Suit. Fujitsu has also infringed and is continuing to infringe the Patents-in-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or import, products including servers that utilize 1U mateable servers and/or hot-swappable drive technology and associated software that infringes the Patents-in-Suit. Such Fujitsu products include at least the Fujitsu Lifebook, Esprimo, Celsius, Primergy, and Eternus computers and servers.

**COUNT I**  
**(Infringement of the ’112 Patent)**

24. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

25. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the ’112 Patent.

26. Fujitsu has and continues to directly infringe the ’112 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’112 Patent. Such products include computer devices, such as laptops, desktops and servers that utilize SMART enabled hard drives. On information and belief, such Fujitsu products include at least the Fujitsu Lifebook, Esprimo, Celsius, Primergy, and Eternus computers and servers that include one or more WD and/or HGST HDDs.

27. For example, Fujitsu has and continues to directly infringe at least Claim 1 of the ’112 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include SMART enabled hard drives such HGST Travelstar and Ultrastar drives.

28. The HGST Travelstar and Ultrastar drives included in one or more Fujitsu

computers and/or servers are small computer system interface (SCSI) devices or the equivalent thereof. The HGST Travelstar and Ultrastar drives include a temperature and motor driving sensor, which monitors an inside temperature of the SCSI device and the driving status of a motor of the SCSI device. The HGST Travelstar and Ultrastar drives further include an I2C processor, such as a microcontroller or processor within the HGST Travelstar and Ultrastar drives or associated I2C interface. The HGST Travelstar and Ultrastar drives further include a power sensor which monitors SCSI device power and receives a command from the master I2C processor through a I2C processor and monitors a power on/off switch to switch on/off the SCSI device power. The HGST Travelstar and Ultrastar drives further include a self-monitoring analysis and report technology (SMART) sensor which monitors a SCSI device status. The HGST Travelstar and Ultrastar drives further include device control logic which reports all previous status reports, error reports and SMART functions to a master I2C processor through a SCSI controller or the equivalent thereof. The HGST Travelstar and Ultrastar drives further include an I2C processor which reports a fault to the master I2C processor through a SCSI channel or an I2C channel when it is determined, by analyzing all information detected by said temperature and motor driving sensor, said power sensor, said power on/off switch and said SMART sensor, that said I2C processor cannot correct said fault.

29. Fujitsu has and continues to indirectly infringe one or more claims of the '112 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology such as laptops, desktops, and servers that utilize SMART enabled hard drives.

30. Fujitsu, with knowledge that these products, or the use thereof, infringe the '112



Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '112 Patent by providing these products to end users for use in an infringing manner.

31. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '112 Patent, but while remaining willfully blind to the infringement.

32. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '112 Patent in an amount to be proved at trial.

33. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '112 Patent, for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

**COUNT II**  
**(Infringement of the '597 Patent)**

34. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

35. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the '597 Patent.

36. Fujitsu has and continues to directly infringe the '597 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '597 Patent. Such products include computer devices, such as laptops, desktops and servers, that utilize HDDs that include microactuators, such as dual stage actuators (DSA). On information and belief, such Fujitsu products include at least the Fujitsu Lifebook, Esprimo, Celsius, Primergy, and Eternus

computers and servers that include one or more WD and/or HGST HDDs.

37. For example, Fujitsu has and continues to directly infringe at least Claim 10 of the '597 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include hard disk drives that include microactuators, such as HGST Travelstar and Ultrastar drives, which include Dual-Stage Actuators.

38. HGST Travelstar and Ultrastar drives which, upon information and belief, are included in one or more Fujitsu computers and/or servers, include one or more Dual-Stage Actuators that are microelectromechanical mechanisms. The Dual Stage Actuator includes a substantially straight expansion member comprising a first and a second end. The Dual State Actuator further includes a base member attached to the first end of the substantially straight expansion member. The Dual Stage Actuator is connected to a shuttle that includes the read/write head. The shuttle is attached to the second end of the substantially straight expansion member such that the expansion member is able to elongate in an elongation direction to bias the shuttle in an output direction substantially different from the elongation direction.

39. Fujitsu has and continues to indirectly infringe one or more claims of the '597 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as laptops, desktops, and servers, that utilize hard drives that include microactuators.

40. Fujitsu, with knowledge that these products, or the use thereof, infringe the '597 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '597 Patent by

providing these products to end users for use in an infringing manner.

41. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '597 Patent, but while remaining willfully blind to the infringement.

42. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '597 Patent in an amount to be proved at trial.

43. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '597 Patent for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

**COUNT III**  
**(Infringement of the '400 Patent)**

44. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

45. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the '400 Patent.

46. Fujitsu has and continues to directly infringe the '400 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '400 Patent. Such products include servers, such as "blade" servers and other industrial personal computers. On information and belief, infringing products include at least the Primergy BX9000 server and BX960 server blades.

47. For example, Fujitsu has and continues to directly infringe at least Claim 1 of the '400 Patent by making, using, offering to sell, selling, and/or importing into the United States

products that include a system of 1U industrial computers. The infringing systems include one or more 1U industrial personal computers such as, for example, the BX960 server blades. The BX9000 can be configured with multiple blades and is therefore a rack for containing a plurality of 1U industrial personal computers. Further, the BX960 is a 1U industrial personal computer having a blind mateable PC connector thereon which mates to a blind mateable connector assembly coupled to the rack, i.e. the BX9000. Furthermore, the BX960 servers are remotely monitored industrial PCs because Fujitsu provides hardware and software for remotely monitoring Fujitsu servers.

48. Fujitsu has and continues to indirectly infringe one or more claims of the '400 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as blind mateable blade servers and enclosures.

49. Fujitsu, with knowledge that these products, or the use thereof, infringe the '400 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '400 Patent by providing these products to end users for use in an infringing manner.

50. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '400 Patent, but while remaining willfully blind to the infringement.

51. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '400 Patent in an amount to be proved at trial.

52. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '400 Patent for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

**COUNT IV**  
**(Infringement of the '012 Patent)**

53. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

54. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the '012 Patent.

55. Fujitsu has and continues to directly infringe the '012 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '012 Patent. Such products include servers, such as "blade" servers and other industrial personal computers. On information and belief, infringing products include at least the Fujitsu Primergy BX9000 and associated Fujitsu Blade Servers including, but not limited to, the Fujitsu BX960.

56. For example, Fujitsu has and continues to directly infringe at least Claim 1 of the '012 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include a system of 1U industrial computers. The infringing systems include one or more 1U industrial personal computers such as, for example, the Fujitsu Primergy BX960. The BX9000 can be configured with multiple blades and is therefore a rack for containing a plurality of 1U industrial personal computers. Further, the BX960 is a 1U industrial personal computer having a blind mateable PC connector thereon which mates to a blind mateable connector assembly coupled to the rack, i.e. the BX9000. Furthermore, the BX960 is an industrial personal computer disposed in one of the plurality of slots.

57. Fujitsu has and continues to indirectly infringe one or more claims of the '012 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as blind mateable blade servers and enclosures.

58. Fujitsu, with knowledge that these products, or the use thereof, infringe the '012 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '012 Patent by providing these products to end users for use in an infringing manner.

59. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '012 Patent, but while remaining willfully blind to the infringement.

60. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '012 Patent in an amount to be proved at trial.

61. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '012 Patent for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

**COUNT V**  
**(Infringement of the '104 Patent)**

62. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

63. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the '104 Patent.

64. Fujitsu has and continues to directly infringe the '104 Patent, either literally or

under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '104 Patent. Such products include servers that include hot-swappable ATA hard drive assemblies. On information and belief, infringing products include at least the Fujitsu Primergy and Eternus servers.

65. For example, Fujitsu has and continues to directly infringe at least Claim 9 of the '104 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include servers with hot-swappable hard drive assemblies. The infringing systems are computer devices that include computer systems formed with at least one standard drive bay and including a power supply and a drive controller conforming to the ATA standard, such as, for example, a serial ATA ("SATA") controller. The infringing servers also include a drive assembly fixedly mounted in said drive bay and connected to said power supply and to said drive controller, with said drive assembly having an opening formed therein. The infringing systems further include at least one removable cartridge having a hard drive device and being dimensioned for insertion into said opening formed in said drive assembly. For example, the Primergy RX1330 M3 includes up to 10 2.5 inch storage drives and a modular raid controller and supports the SATA standard. The infringing systems further include a printed circuit board electronically connected between said hard drive device and said drive controller of the system host, said printed circuit board being programmed to modify an identification of the hard drive device and to said system host that said hard drive is a removable drive. For example, the infringing servers include a printed circuit board that includes RAID components.

66. Fujitsu has and continues to indirectly infringe one or more claims of the '104 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-

users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as servers with hot-swappable hard drives.

67. Fujitsu, with knowledge that these products, or the use thereof, infringe the '104 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '104 Patent by providing these products to end users for use in an infringing manner.

68. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '104 Patent, but while remaining willfully blind to the infringement.

69. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '104 Patent in an amount to be proved at trial.

70. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '104 Patent for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

**COUNT VI**  
**(Infringement of the '170 Patent)**

71. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

72. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the '170 Patent.

73. Fujitsu has and continues to directly infringe the '170 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that



satisfy each and every limitation of one or more claims of the '170 Patent. Such products include computer devices, such as laptops, desktops and servers that utilize disk drives in connection with a fall sensor, such as the Fujitsu 3D fall sensor. On information and belief, such Fujitsu products include at least the Fujitsu Lifebook that includes a Solid State Drive (SSD).

74. For example, Fujitsu has and continues to directly infringe at least Claim 6 of the '170 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include SSDs, fall sensors, and associated software.

75. On information and belief, the Fujitsu Lifebook is a terminal that comprises at least one non-volatile memory device, such as one or more SSDs. On information and belief, the Fujitsu Lifebook includes a sensor capable of detecting that the terminal is falling. On information and belief, the Fujitsu Lifebook includes a controller coupled to the non-volatile memory device. On information and belief, the controller operates in response to initiating a data write operation with the non-volatile memory device to activate the sensor and during the write operation, to monitor the sensor to determine if the terminal is falling and, if it is determined that the terminal is falling, to terminate the write operation and to cause the non-volatile memory device to execute a non-volatile memory shutdown procedure. On information and belief, if the controller included within the Fujitsu Lifebook determines that the Fujitsu Lifebook is not falling, the controller allows the write action to complete and deactivates the sensor.

76. Fujitsu has and continues to indirectly infringe one or more claims of the '170 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing

technology, such as laptops that include fall sensors.

77. Fujitsu, with knowledge that these products, or the use thereof, infringe the '170 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '170 Patent by providing these products to end users for use in an infringing manner.

78. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '170 Patent, but while remaining willfully blind to the infringement.

79. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '170 Patent in an amount to be proved at trial.

80. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '170 Patent, for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

**COUNT VII**  
**(Infringement of the '444 Patent)**

81. Paragraphs 1 through 23 are incorporated by reference as if fully set forth herein.

82. LHD has not licensed or otherwise authorized Fujitsu to make, use, offer for sale, sell, or import any products that embody the inventions of the '444 Patent.

83. Fujitsu has and continues to directly infringe the '444 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '444 Patent. Such products include computer devices, such as laptops, desktops and servers, that utilize disk drives in

connection with a fall sensor, such as the Fujitsu 3D fall sensor. On information and belief, such Fujitsu products include at least the Fujitsu Lifebook that includes a Solid State Drive (SSD).

84. For example, Fujitsu has and continues to directly infringe at least claim 14 of the '444 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include SSDs, fall sensors, and associated software.

85. On information and belief, the Fujitsu Lifebook is an electronic device that includes a processor, a fall sensor, and one or more SSD. On information and belief, the Fujitsu Lifebook includes software in the form of a computer-readable storage medium including computer readable instructions stored therein that, upon execution by the processor, perform operations comprising initiating a write operation of data to the SSD. On information and belief, during the initiated write operation, the software monitors the sensor to determine if the electronic device is accelerating. On information and belief, the monitoring occurs at a sampling rate selected based on at least one of a type of the solid-state memory device, an amount of time to execute a solid-state memory device shutdown procedure, or a threshold distance over which the electronic device can move. On information and belief, the software further determines if the Fujitsu Lifebook is accelerating and interrupts the initiated write operation and executes the solid-state memory device shutdown procedure.

86. Fujitsu has and continues to indirectly infringe one or more claims of the '444 Patent by knowingly and intentionally inducing others, including Fujitsu customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as laptops that include fall sensors.

87. Fujitsu, with knowledge that these products, or the use thereof, infringe the '444

Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '444 Patent by providing these products to end users for use in an infringing manner.

88. Fujitsu induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '444 Patent, but while remaining willfully blind to the infringement.

89. LHD has suffered damages as a result of Fujitsu's direct and indirect infringement of the '444 Patent in an amount to be proved at trial.

90. LHD has suffered, and will continue to suffer, irreparable harm as a result of Fujitsu's infringement of the '444 Patent, for which there is no adequate remedy at law, unless Fujitsu's infringement is enjoined by this Court.

#### **DEMAND FOR JURY TRIAL**

Plaintiff hereby demands a jury for all issues so triable.

#### **PRAYER FOR RELIEF**

WHEREFORE, LHD prays for relief against Fujitsu as follows:

- a. Entry of judgment declaring that Fujitsu has directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;
- b. An order pursuant to 35 U.S.C. § 283 permanently enjoining Fujitsu, its officers, agents, servants, employees, attorneys, and those persons in active concert or participation with it, from further acts of infringement of the Patents-in-Suit;
- c. An order awarding damages sufficient to compensate LHD for Fujitsu's infringement of the Patents-in-Suit, but in no event less than a reasonable royalty, together with

interest and costs;

d. Entry of judgment declaring that this case is exceptional and awarding LHD its costs and reasonable attorney fees under 35 U.S.C. § 285; and

e. Such other and further relief as the Court deems just and proper.

Dated: May 24, 2018

Respectfully submitted,

/s/ Alfred R. Fabricant

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