

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

LONGHORN HD LLC.,)	
)	
Plaintiff,)	
)	Case No. 2:19-cv-
v.)	
)	JURY TRIAL DEMANDED
ASROCK INC,)	
)	
Defendant.)	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Longhorn HD LLC. (“LHD” or “Plaintiff”), for its Complaint against Defendant ASRock Inc. (“ASRock” or “Defendant”) 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 ASRock is a corporation organized and existing under the laws of Taiwan, with its principal place of business located at 4F., No.37, Sec. 2, Jhongyang S. Rd., Beitou District, Taipei City 112, Taiwan (R.O.C.), and may be served pursuant to the provisions of the Hague Convention. ASRock is a leading manufacturer and seller of computers and server equipment in the world and in the United States. Upon information and belief, ASRock 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 Defendant. Defendant regularly conducts business and has 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 because, among other things, Defendant 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).

6. Defendant is subject to this Court's jurisdiction pursuant to due process and/or the Texas Long Arm Statute due at least to its 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 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>.

9. 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>.

10. 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>.

11. LHD is the sole and exclusive owner of all right, title, and interest in the ’112 Patent, the ’400 Patent, the ’012 Patent, and the ’104 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.

12. 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

13. The Patents-in-Suit generally cover systems and methods for use in computer and

server storage and structure.

14. 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 include the ability to monitor status including temperature, motor, and power status, among other features. Upon information and belief, ASRock makes, uses, sells, and/or imports infringing devices contained in ASRock computers such as the 1U12LX-14S, 2U4N, and EP2C612D16HM computers.

15. 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, ASRock makes, uses, sells, and/or imports infringing computers such as servers including, but not limited to the 2U4N Servers. Upon information and belief, these infringing ASRock server products further include management modules that provide remote management capabilities.

16. 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, ASRock makes, uses, sells, and/or imports infringing computers such as servers including, but not limited to the 1U12LX-14S Server. Upon information and belief, these infringing ASRock server products further include hot-swappable hard drive modules that are configured with Redundant Array of Multiple Disks (“RAID”).

17. ASRock 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 importing, products including servers and racks that utilize the above technology, and associated software that infringes the Patents-in-Suit. ASRock 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 importing, products including servers that utilize 1U mateable servers and/or hot-swappable drive technology and associated software that infringes the Patents-in-Suit. Such ASRock products include ASRock computers including at least the ASRock 1U12LX-14S and 2U4N Servers.

COUNT I
(Infringement of the '112 Patent)

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

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

20. Defendant 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 ASRock products include at least the ASRock 1U12LX-14S that include one or more SAS HDDs with SMART enabled technology.

21. For example, Defendant 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 as the 1U12LX-14S Server.

22. The 1U12LX-14S Server includes a small computer system interface (SCSI) device or the equivalent thereof. The 1U12LX-14S Server includes 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. For example, the 1U12LX-14S Server includes Drive Plane Boards which contain temperature sensors which monitor the temperature of attached HDDs. The 1U12LX-14S further includes an I2C processor, such as a microcontroller or processor within the associated hard-drives or associated I2C interface. The 1U12LX-14S further includes a power sensor which monitors SCSI device power and receives a command from the master I2C processor through an I2C processor and monitors a power on/off switch to switch on/off the SCSI device power. The 1U12LX-14S further includes a self-monitoring analysis and report technology (SMART) sensor which monitors a SCSI device status. The 1U12LX-14S further includes 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 1U12LX-14S further includes 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.

23. Defendant has and continues to indirectly infringe one or more claims of the '112 Patent by knowingly and intentionally inducing others, including ASRock 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.

24. Defendant, 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.

25. Defendant 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.

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

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

COUNT II
(Infringement of the '400 Patent)

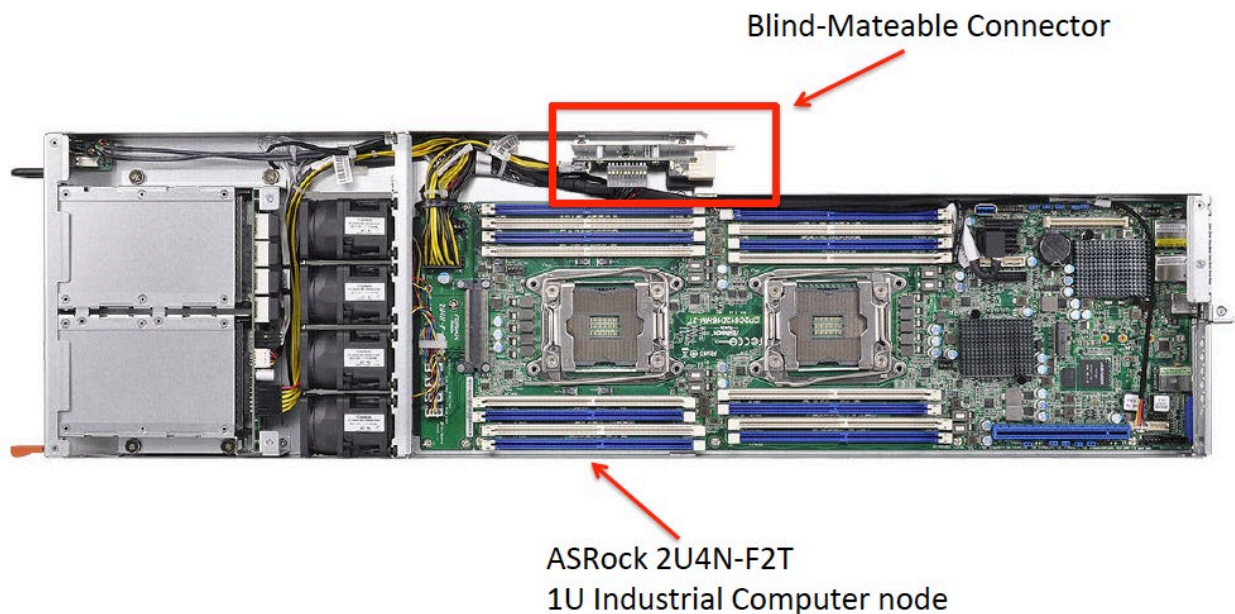
28. Paragraphs 1 through 17 are incorporated by reference as if fully set forth herein.

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

30. Defendant 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 that have, among other things, a blind mateable PC connector which mates to a blind mateable connector assembly coupled to a rack. On information and belief, infringing products include at least the ASRock 2U4N servers including, but not limited to, the ASRock 2U4N-F2T.

31. For example, Defendant 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 ASRock 2U4N-F2T. The 2U4N-F2T contains 1U industrial computers which are blind mateable within a larger 2U enclosure. The ASRock 2U4N-F2T contains blind mateable connections for 2U of server space.¹



¹ <https://www.asrockrack.com/general/productdetail.asp?Model=2U4N-F2T#Specifications>

32. Furthermore, the ASRock 2U4N-F2T units are remotely monitored industrial computers because ASRock provides hardware and software for remotely monitoring its devices. For example, the 2U4N-F2T servers include Management features such as the ASPEED AST2400 BMC Controller.²

Management	
BMC Controller	- ASPEED AST2400
IPMI Dedicated GLAN	- 1 x Realtek RTL8211E for dedicated management GLAN
Features	- Watch Dog - NMI

33. Defendant has and continues to indirectly infringe one or more claims of the '400 Patent by knowingly and intentionally inducing others, including ASRock 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.

34. Defendant, 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.

35. Defendant 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.

36. LHD has suffered damages as a result of Defendant's direct and indirect

² <https://www.asrockrack.com/general/productdetail.asp?Model=2U4N-F2T#Specifications>

infringement of the '400 Patent in an amount to be proved at trial.

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

COUNT III
(Infringement of the '012 Patent)

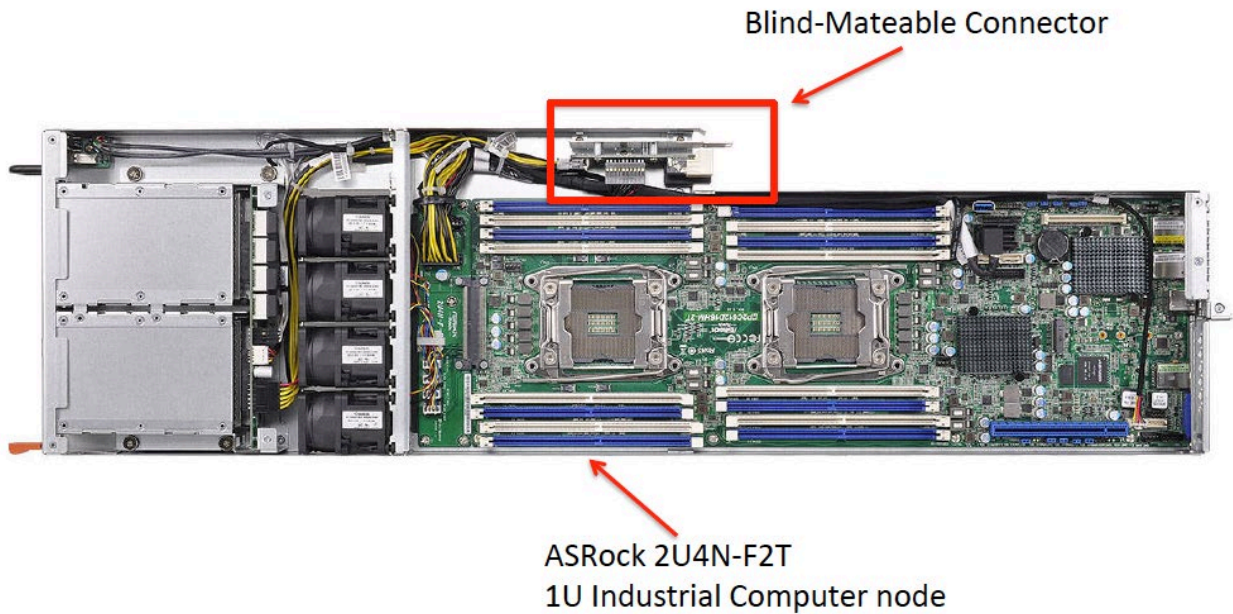
38. Paragraphs 1 through 17 are incorporated by reference as if fully set forth herein.

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

40. Defendant 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 '400 Patent. Such products include servers that have, among other things, a blind mateable PC connector which mates to a blind mateable connector assembly coupled to a rack. On information and belief, infringing products include at least the ASRock 2U4N servers including, but not limited to, the ASRock 2U4N-F2T.

41. For example, Defendant 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 ASRock ASRock 2U4N-F2T. The ASRock 2U4N-F2T contains 1U industrial computers which are blind mateable within

a larger 2U enclosure.³



42. Furthermore, the ASRock 2U4N-F2T units are remotely monitored industrial computers because ASRock provides hardware and software for remotely monitoring its devices. For example, the 2U4N-F2T servers include Management features, such as the ASPEED AST2400 BMC Controller.⁴

Management	
BMC Controller	- ASPEED AST2400
IPMI Dedicated GLAN	- 1 x Realtek RTL8211E for dedicated management GLAN
Features	- Watch Dog - NMI

43. Defendant has and continues to indirectly infringe one or more claims of the '012 Patent by knowingly and intentionally inducing others, including ASRock customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using,

³ <https://www.asrockrack.com/general/productdetail.asp?Model=2U4N-F2T#Specifications>

⁴ <https://www.asrockrack.com/general/productdetail.asp?Model=2U4N-F2T#Specifications>

offering to sell, selling and/or importing into the United States products that include infringing technology such as blind mateable blade servers and enclosures.

44. Defendant, 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.

45. Defendant 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.

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

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

COUNT IV
(Infringement of the '104 Patent)

48. Paragraphs 1 through 17 are incorporated by reference as if fully set forth herein.

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

50. Defendant 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 ASRock 1U12LX-14S Server and associated ASRock Servers including, but not limited to, the ASRock 1U12LX-14S Server and 2U4N Servers.

51. For example, Defendant 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, such as the ASRock 1U12LX-14S Server, 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 1U12LX-14S Server includes hot swap bays 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. As a further example, the infringing servers are compatible with printed circuit boards that include RAID components, such as the LSI 2308.

52. Defendant has and continues to indirectly infringe one or more claims of the '104

Patent by knowingly and intentionally inducing others, including ASRock 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.

53. Defendant, 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.

54. Defendant 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.

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

56. LHD has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '104 Patent for which there is no adequate remedy at law, unless Defendant'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 Defendant as follows:

a. Entry of judgment declaring that Defendant 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 Defendant, 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 Defendant'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: February 25, 2019

Respectfully submitted,

/s/Alfred R. Fabricant

Alfred R. Fabricant
NY Bar No. 2219392
Email: afabricant@brownrudnick.com
Peter Lambrianakos
NY Bar No. 2894392
Email: plambrianakos@brownrudnick.com
Vincent J. Rubino, III
NY Bar No. 4557435
Email: vrubino@brownrudnick.com
John Andrew Rubino
NY Bar No. 5020797
Email: jrubino@brownrudnick.com
BROWN RUDNICK LLP
7 Times Square
New York, NY 10036
Telephone: (212) 209-4800

Justin Kurt Truelove
Texas Bar No. 24013653
Email: kurt@truelovelawfirm.com
TRUELOVE LAW FIRM, PLLC
100 West Houston
Marshall, Texas 75670
Telephone: 903-938-8321

Facsimile: 903-215-8510

**ATTORNEYS FOR PLAINTIFF,
LONGHORN HD LLC.**