

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

WSOU INVESTMENTS, LLC D/B/A
BRAZOS LICENSING AND DEVELOPMENT,

Plaintiff,

v.

HEWLETT PACKARD ENTERPRISE COMPANY,

Defendant.

No. 6:20-cv-00729

JURY TRIAL DEMANDED

**BRAZOS’S COMPLAINT AGAINST HPE FOR
INFRINGEMENT OF U.S. PATENT NO. 7,646,729**

Plaintiff WSOU Investments, LLC d/b/a Brazos Licensing and Development (“Brazos”),
by and through its attorneys, files this Complaint for Patent Infringement against defendant
Hewlett Packard Enterprise Company (“HPE”) and alleges:

NATURE OF THE ACTION

1. This is a civil action for patent infringement arising under the Patent Laws of the
United States, 35 U.S.C. §§ 1 *et seq.*, including §§ 271, 281, 284, and 285.

THE PARTIES

2. Brazos is a limited liability corporation organized and existing under the laws of
Delaware, with its principal place of business at 606 Austin Avenue, Suite 6, Waco, Texas
76701.

3. On information and belief, HPE is a corporation organized and existing under the
laws of Delaware, with a regular and established place of business located at 14231 Tandem
Boulevard, Austin, Texas 78728. HPE may be served through its designated agent for service of
process, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas, 75201.

JURISDICTION AND VENUE

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

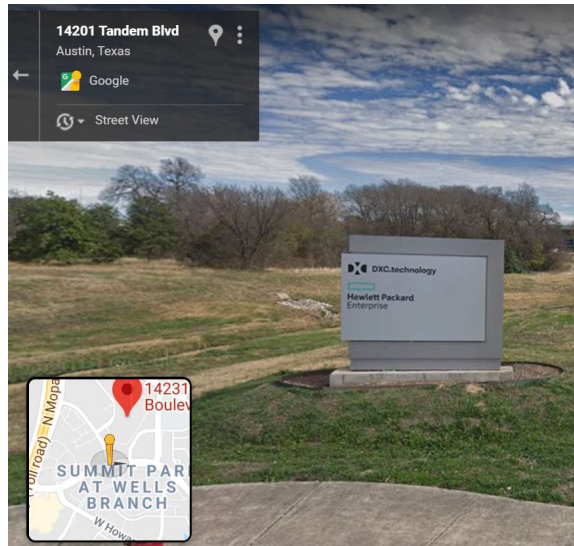
5. This Court has specific and general personal jurisdiction over HPE pursuant to due process and/or the Texas Long Arm Statute because HPE has committed and continues to commit acts of patent infringement, including acts giving rise to this action, within the State of Texas and within this Judicial District. The Court's exercise of jurisdiction over HPE would not offend traditional notions of fair play and substantial justice because HPE has established minimum contacts with the forum. For example, on information and belief, HPE has committed acts of infringement in this Judicial District, directly and/or through intermediaries, by, among other things, making, using, offering to sell, selling, and/or importing products and/or services that infringe the Asserted Patent, as alleged herein.

6. Upon information and belief, HPE has continuous and systematic business contacts with the State of Texas. HPE is registered to do business in the State of Texas, has offices and facilities in the State of Texas, and actively directs its activities to customers located in the State of Texas. HPE, directly and/or through affiliates and/or intermediaries, conducts its business extensively throughout Texas, by shipping, importing, manufacturing, distributing, offering for sale, selling, and/or advertising its products and services in the State of Texas and this Judicial District.

7. Venue is proper in this Court pursuant to 28 U.S.C. § 1400(b). HPE is registered to do business in Texas and, upon information and belief, HPE has offices in this Judicial District, has transacted business in this Judicial District, and has committed acts of direct and indirect infringement in this Judicial District by, among other things, importing, offering to sell,

and selling products that infringe the Asserted Patent. HPE has regular and established places of business in this Judicial District, as set forth below.

8. HPE maintains a regular and established place of business in this Judicial District, at least at 14231 Tandem Boulevard, Austin, Texas 78728:^{1,2}



9. Upon information and belief, HPE conducts business and serves customers from its regular and established place of business in Austin, Texas, in this District. Upon information and belief, HPE's Austin office is located on a 52-acre campus.³

10. In October 2019, it was reported that HPE signed a lease for a 27,326-square-foot-space in a 164,714-square-foot office building in North Austin at Paloma Ridge, located at 13620 FM 620 Austin, Texas, 78717.⁴

¹ See <https://www.hpe.com/us/en/contact-hpe.html>.

² See <https://goo.gl/maps/mojArn1WxaHcHU8v8>; see also <https://goo.gl/maps/cBjm1De4gVPFMeam9>.

³ See <https://www2.colliers.com/en/properties/austin-continuum/USA-14231-tandem-boulevard-austin-tx-78728/usa1046778>.

⁴ See <https://communityimpact.com/local-news/austin/leander-cedar-park/coming-soon/2019/10/23/hewlett-packard-signs-lease-at-paloma-ridge-on-fm-620/>.

11. Upon information and belief, HPE owns at least two properties in Austin, Texas, in this Judicial District.⁵

12. HPE maintains regular and established places of business in the State of Texas, nearby to this District, including at 11445 Compaq Center West Drive Houston, Texas, 77070; and 6080 Tennyson Parkway, Suite 400, Plano, Texas 75024.⁶

13. HPE website states that HPE is as “a global edge-to-cloud Platform-as-a-Service company . . . that helps customers connect, protect, analyze, and act on all [of the customer’s] data and applications wherever they live”⁷ Upon information and belief, HPE designs, manufactures, uses, imports into the United States, sells, and/or offers for sale in the United States products that infringe the Asserted Patent, directly and or through intermediaries, as alleged herein. HPE markets, sells, and/or offers to sell its products and/or services, including those accused herein of infringement, to actual and potential customers and end-users located in Texas and in this Judicial District, as alleged herein.

14. HPE organizes its business into “four segments,” as described in its Form 10-K for the fiscal year ended October 31, 2019. One of these “segments” is the “Intelligent Edge” segment, which “provides a portfolio of secure Edge-to-Cloud solutions . . . that include wireless local area network (‘LAN’), campus and data center switching, software-defined wide area networking, security, and associated services to enable secure connectivity for business of any size.” HPE’s “Intelligent Edge” “segment” “operat[es] under the Aruba brand.” HPE reports

⁵ See <http://propaccess.traviscad.org/clientdb/SearchResults.aspx> (printout attached as Exhibit B).

⁶ See *supra* note 1.

⁷ See <https://www.hpe.com/us/en/about.html>.

revenues from the “HPE Aruba Product” and “HPE Aruba Service” business units within the Intelligent Edge segment of its business on its Form 10-K.⁸

15. HPE advertises and sells HPE Aruba Products and HPE Aruba Services to customers, *inter alia*, as part of its Networking portfolio, which is comprised of “AI-powered networking solutions for the Intelligent Edge.”⁹ HPE also promotes and sells HPE Aruba Products and HPE Aruba Services to customers as part of its “HPE OEM integrated solution” or “HPE OEM Solutions” portfolio.”¹⁰

16. HPE’s website permits users to configure and customize HPE products, including HPE Aruba Products and HPE Aruba Services, and request prices quote from HPE on the configured products.¹¹ HPE’s website also permits users to purchase HPE products, including HPE Aruba Products, directly from HPE’s website.¹²

17. Upon information and belief, HPE offers trainings and/or certifications to its employees including, *inter alia*, trainings and certifications regarding the sales and/or service of HPE products, including HPE Aruba Products and HPE Aruba Services. For example, HPE offers an HPE Sales Certification to HPE employees, including HPE sales team members, that teaches how to “describe, position and recommend” HPE Aruba Products and HPE Aruba Services to customers.”¹³

⁸ See <https://investors.hpe.com/~media/Files/H/HP-Enterprise-IR/documents/hpe-10k2019.pdf>.

⁹ See <https://www.hpe.com/us/en/networking.html>.

¹⁰ See <https://www.hpe.com/us/en/oem.html>.

¹¹ See, e.g., <https://h22174.www2.hpe.com/SimplifiedConfig/Welcome> (printout attached as Exhibit C).

¹² See, e.g., <https://buy.hpe.com/us/en/networking/switches/modular-ethernet-switches/aruba-8400-switch-products/aruba-8400-switch-series/p/1010129959>.

¹³ See <https://certification-learning.hpe.com/tr/datacard/Certification/Aruba-SCE-APAS>.

18. As of August 2020, HPE advertised at least fifteen public job postings for positions at HPE's Austin, Texas office.¹⁴ At least one such posting advertised an opening in HPE's Austin office for a Driver Software Engineer, whose responsibilities include, *inter alia*, the ability to "[d]esign, develop, and integrate driver software features and capabilities for HPE's networking product line,"¹⁵ which includes HPE Aruba Products and HPE Aruba Services.¹⁶

COUNT I
(Infringement of U.S. Patent No. 7,646,729)

19. Brazos re-alleges and incorporates by reference the preceding paragraphs 1–18 of this Complaint.

20. On January 12, 2010, the U.S. Patent & Trademark Office duly and legally issued U.S. Patent No. 7,646,729 (the "'729 Patent"), entitled "Method and Apparatus for Determination of Network Topology." A true and correct copy of the '729 Patent is attached as Exhibit A to this Complaint.

21. Brazos is the owner of all rights, title, and interest in and to the '729 Patent, including the right to assert all causes of action arising under the '729 Patent and the right to any remedies for the infringement of the '729 Patent.

22. HPE makes, uses, sells, offers for sale, imports, and/or distributes in the United States, including within this Judicial District, switches with support for Ethernet Ring Protection

¹⁴ See <https://www.linkedin.com/jobs/search?keywords=Hewlett%20Packard%20Enterprise&location=Austin%2C%20Texas%2C%20United%20States> (printout attached as Exhibit D).

¹⁵ See <https://www.linkedin.com/jobs/view/driver-software-engineer-at-hewlett-packard-enterprise-1901505190/>.

¹⁶ See *supra* note 9.

Switching (ERPS), including, but not limited to, FlexNetwork 7500 Series switches,¹⁷ HPE FlexFabric 5710 Series switches,¹⁸ Aruba CX 8400 Series switches,¹⁹ HPE FlexFabric 5940 and 5930 Series switches,²⁰ HPE FlexFabric 12900E Series switches,²¹ HPE FlexNetwork 5130 HI Series switches,²² and HPE FlexNetwork 5510 HI Series switches²³ (collectively, the “Accused Products”).²⁴

23. The Accused Products include “HPE Aruba Products” and/or “HPE Aruba Services” as described in HPE’s Form 10-K for the fiscal year ended October 31, 2019.²⁵

¹⁷ See <https://buy.hpe.com/us/en/networking/networking-switches/hpe-flexnetwork-7500-switch-series/p/4177519>; see also https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-c05366186.

¹⁸ See <https://buy.hpe.com/us/en/networking/networking-switches/hpe-flexfabric-5710-switch-series/p/1010868971>; see also https://support.hpe.com/hpesc/public/docDisplay?docId=a00050572en_us; https://techhub.hpe.com/eginfolib/networking/docs/switches/5710/5200-4983_hi-avail_cg/content/bk01-toc.htm.

¹⁹ See <https://buy.hpe.com/us/en/networking/switches/modular-ethernet-switches/aruba-8400-switch-products/aruba-8400-switch-series/p/1010129959>; <https://www.arubanetworks.com/products/networking/switches/8400-series/>; see also https://techhub.hpe.com/eginfolib/Aruba/OS-CX_10.03/5200-5958/index.html#GUID-A100D19F-3FC6-49DD-B63B-90A18C0FA1EF.html

²⁰ See <https://buy.hpe.com/us/en/networking/networking-switches/hpe-flexfabric-5940-switch-series/p/1009148840>; see also https://techhub.hpe.com/eginfolib/networking/docs/switches/5940-5930/5200-4864_hi-avail_cg/content/bk01-toc.htm.

²¹ See <https://buy.hpe.com/us/en/networking/networking-switches/hpe-flexfabric-12900e-switch-series/p/5443167>; see also https://techhub.hpe.com/eginfolib/networking/docs/switches/12900E/5200-4934_hi-avail_cg/content/bk01-toc.htm.

²² See <https://buy.hpe.com/us/en/networking/networking-switches/hpe-flexnetwork-5130-hi-switch-series/p/1008605458>; see also https://techhub.hpe.com/eginfolib/networking/docs/switches/5130hi/cg/5200-3603_hi-avail_cg/content/index.htm.

²³ See <https://buy.hpe.com/us/en/networking/networking-switches/hpe-flexnetwork-5510-hi-switch-series/p/1008652960>; see also https://techhub.hpe.com/eginfolib/networking/docs/switches/5510hi/cr/5200-3843_hi-avail_cr/content/index.htm.

²⁴ See also *supra* note 9.

²⁵ See *supra* note 8.

24. The Accused Products practice a method for managing a communications network.

25. The Accused Products “comprise[] modular, multilayer chassis switches that meet the evolving needs of integrated services networks. The switches can be deployed in multiple networking environments, including the enterprise LAN core, aggregation layer, and wiring closet edge. Moreover, these switches deliver wire-speed Layer 2 and Layer 3 routing services for the most demanding applications with hardware-based IPv4 and IPv6 support.”²⁶

26. “Ethernet Ring Protection Switching (ERPS) is a robust link layer protocol that ensures a loop-free topology and implements quick link recovery.”²⁷

27. The Accused Products practice a method comprising the step of adapting a sniffer to collect information from nodes of a first outer nodal area of the communications network. The Accused Products perform the adapting step by configuring the sniffer as a partition designated inner-nodal area node of the first outer nodal area.

28. The Accused Products provide a feature of flushing packets to update MAC addresses in the nodes of the major ring for the update in topology change in a subring. The Accused Products use “ERPS protocol packets” that “are Ring Automatic Protection Switching (R-APS) packets,” including the “Flush” packet type, which function as follows: “If the topology of the subring changes, the interconnection ports on the subring broadcasts flush packets. All nodes that receive the flush packets update MAC address entities.”²⁸

29. In an ERPS, each major ring (*i.e.*, inner nodal area) connects with subrings (*i.e.*, outer nodal areas) via interconnection nodes. For example, an ERPS can be implemented with a

²⁶ See https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-c02699625.

²⁷ See <https://support.hpe.com/hpesc/public/docDisplay?docId=c05366186> at 96.

²⁸ See *supra* note 12 at 97.

network that “has three or more rings” in which “[e]ach subring is connected to the major ring by two interconnection nodes.” The figure (hereinafter, Figure A) below is a diagram of such a network:²⁹

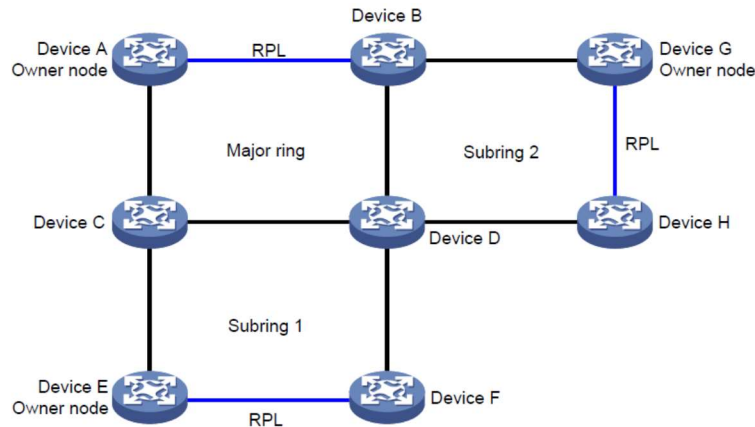


Figure A

Figure A shows a major ring (*i.e.*, inner nodal area) connected to two subrings, Subring 1 (*i.e.*, second outer nodal area) and Subring 2 (*i.e.*, first outer nodal area).

30. The topology changes and flushing of the forwarding database information can occur only through interconnection nodes into the major ring. The interconnection nodes can be a part of both the major ring and subring at the same time. The interconnection nodes can forward information to the major ring as well as can communicate with subrings. According to the ERPS standard (ITU-T G.8032/Y.1344 (02/2012)):³⁰

The topology change propagation process is described in clause 10.1.12; it generates a signal to inform the entities of other network domains attached to a sub-ring of topology changes on the sub-ring. This process exists only of the ERP control processes of sub-ring interconnection nodes.

The interconnection flush logic is described in clause 10.1.11. It receives topology change notification information from other

²⁹ See *supra* note 12 at 101–02 (Fig. 30).

³⁰ See https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-G.8032-201202-S!!PDF-E&type=items at 23–24.

connected entities, such as a sub-ring's ERP control process and ETH_C_MI_RAPS_Propagate_TC management information. Based on this information, it may initiate flushing of the FDB for the local ring ports and may trigger transmission of R-APS event requests to both ring ports. This logic is included on the ERP control processes of the interconnection nodes of Ethernet rings that sub-rings are connected to. This logic is not present on Ethernet ring nodes that are not interconnection nodes.

31. As shown, for example, in Figure A, the Device D (*i.e.*, interconnection node) is a part of the major ring and the subring 2. Device D can communicate with Device H of subring 2, and also communicates with Device A of the major ring.

32. A ring ID uniquely identifies an ERPS ring. All nodes on an ERPS ring must have a configuration of the same ring ID. The nodes of one ring (*e.g.*, configured with ring ID '1') cannot communicate with nodes of a different ring (*e.g.*, configured with ring ID '2'). For example, in Figure A, the Device H of subring 2 cannot directly communicate with Device A of the major ring due to different ring IDs. Device D being a part of both the rings (*i.e.*, major ring and subring2) configured with the respective ring IDs provides a communication path from Device H to Device A. "A ring ID uniquely identifies an ERPS ring" and "[a]ll nodes on an ERPS ring must be configured with the same ring ID."³¹

33. As shown, for example, in Figure A, in case of a link failure between Device G and Device H, the major ring is unaware of topology change as Device H cannot communicate directly with the nodes of the major ring (*e.g.*, Device A) as both the devices are configured with different ring IDs. The interconnection node (*e.g.*, Device D) acts as a sniffer (*i.e.*, adapting a sniffer to sniff the topology change packets) to forward the information to the major ring. The Accused Products enable the interconnection nodes to forward flush packets (*i.e.*, adapting a sniffer to sniff the topology change packets) for topology changes in subring to the major ring.

³¹ See *supra* note 12 at 105.

“Enabling flush packet transparent transmission” “enables the interconnection nodes to forward flush packets for topology changes in the subring to the major ring.”³² In order to enable ERPS, a required task includes “[e]nabling flush packet transparent transmission.”³³

34. The communications network in which the Accused Products operate comprises an inner nodal area and a plurality of outer nodal areas connected to the inner nodal area via respective nodes of the inner nodal area, each outer nodal area comprising a plurality of nodes, each of the plurality of nodes configured to send link status messages only to other nodes of the outer nodal area.

35. The Accused Products implement ERPS topology for managing a communication network. An ERPS communication network is partitioned into major rings (*i.e.*, an inner nodal area) and subrings (*i.e.*, the plurality of outer nodal areas). “ERPS rings can be divided into major rings and subrings. An ERPS network consists of one major ring or multiple major rings, and multiple subrings. By default, a ring is a major ring. You can configure a ring as a subring manually.”³⁴

36. As shown, for example, in Figure A, Devices A, B, C, D form a major ring (*i.e.*, inner ring), the Devices B, G, D, H, and the Devices C, D, E, F forms subring 1 and subring 2 respectively. The Subrings connect with the major ring via the interconnection nodes, which are Device B, C, D (*i.e.*, a plurality of outer nodal areas connected to the inner nodal area via respective nodes of the inner nodal area). The Device D being a part of subring 2, collects (*i.e.*, sniffs) information (*e.g.*, Link Status information/topology change information) flown internally

³² See *supra* note 12 at 105.

³³ See *supra* note 27 at 103–04.

³⁴ See *supra* note 12 at 96.

and flushes the information (*e.g.*, topology change information) in the major ring since it is also part of the major ring.

37. The Accused Products practice a method comprising the step of adapting the sniffer to collect information from nodes of a second outer nodal area of the communications network by configuring the sniffer as a partition designated inner-nodal-area node of the second outer nodal area.

38. As shown, for example, in Figure A, if there is a fault in the link between Device E and Device F, the major ring is unaware of topology change as Device F cannot communicate directly with the nodes of the major ring (*e.g.*, Device A) as both the devices are configured with different ring IDs. The Device D (*i.e.*, interconnection node/sniffer) being a part of subring 1 (*i.e.*, configured as partition designated inner-nodal-area node of the second outer nodal area), collects (*i.e.*, sniffs) information (*e.g.*, topology change information) flown internally of subring 1 and flushes the information in the major ring.

39. The Accused Products practice a method comprising the step of determining a topology of at least a portion of the communications network using the collected information, the portion of the communications network comprising the first and second outer nodal areas.

40. As shown, for example, in Figure A, in case of a link failure between Device D and Device H, the major ring is unaware of topology change as Device H cannot communicate directly with the nodes of the major ring (*e.g.*, Device A) as both the devices are configured with different ring IDs. The interconnection nodes (*e.g.*, Device D) acts as a sniffer (*i.e.*, sniffs the topology change packets) to forward the information to the major ring (*i.e.*, adapting a sniffer). The nodes of the major ring (*e.g.*, Device A) update the MAC address entries based on the received flush packets. The information will allow the nodes of the major ring (*e.g.*, Device A) to

communicate with Device H via a new determined topology based on the updated address (*i.e.*, via Device B and Device G).

41. In view of preceding paragraphs 24–40, each and every element of at least claim 1 of the '729 Patent is practiced by the Accused Products.

42. HPE continues to directly infringe at least one claim of the '729 Patent, literally or under the doctrine of equivalents, by making, using, selling, offering for sale, importing, and/or distributing the Accused Products in the United States, including within this Judicial District, without the authority of Brazos. HPE's infringing use of the Accused Products includes its internal use and testing of the Accused Products.

43. HPE has received notice and actual or constructive knowledge of the '729 Patent since at least the date of service of this Complaint.

44. Since at least the date of service of this Complaint, through its actions, HPE has actively induced product makers, distributors, retailers, and/or end users of the Accused Products to infringe the '729 Patent throughout the United States, including within this Judicial District, by, among other things, advertising and promoting the use of the Accused Products in various websites, including providing and disseminating product descriptions, operating manuals, and other instructions on how to implement and configure the Accused Products. Examples of such advertising, promoting, and/or instructing include the documents at:

- <https://support.hpe.com/hpesc/public/km/search?q=erps>;
- https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-c02699625; and
- <https://support.hpe.com/hpesc/public/docDisplay?docId=c05366186>.

HPE was and is aware that the normal and customary use by end users of the Accused Products infringes the '729 patent. HPE's inducement is ongoing.

45. Since at least the date of service of this Complaint, through its actions, HPE has contributed to the infringement of the '729 Patent by having others sell, offer for sale, or use the Accused Products throughout the United States, including within this Judicial District, with knowledge that the Accused Products infringe the '729 Patent. The Accused Products have special features that are especially made or adapted for infringing the '729 Patent and have no substantial non-infringing use. For example, in view of the preceding paragraphs, the Accused Products contain functionality which is material to at least claim 1 of the '729 Patent.

46. The special features include implementing Ethernet Ring Protection Switching (ERPS) with a feature of flushing packets to update MAC address entries in connection with topology changes, which is used in a manner that infringes the '729 Patent.

47. The special features constitute a material part of the invention of one or more claims of the '729 Patent and are not staples articles of commerce suitable for substantial non-infringing use.

48. Brazos has suffered damages as a result of HPE's direct and indirect infringement of the '729 Patent in an amount adequate to compensate for HPE's infringement, but in no event less than a reasonable royalty for the use made of the invention by HPE, together with interest and costs as fixed by the Court.

JURY DEMAND

Brazos hereby demands a jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Brazos respectfully requests that the Court:

(a) enter judgment that HPE infringes one or more claims of the '729 Patent literally and/or under the doctrine of equivalents;

(b) enter judgment that HPE has induced infringement and continues to induce infringement of one or more claims of the '729 Patent;

(c) enter judgment that HPE has contributed to and continues to contribute to the infringement of one or more claims of the '729 Patent;

(d) award Brazos damages, to be paid by HPE in an amount adequate to compensate Brazos for such damages, together with pre-judgment and post-judgment interest for the infringement by HPE of the '729 Patent through the date such judgment is entered in accordance with 35 U.S.C. § 284, and increase such award by up to three times the amount found or assessed in accordance with 35 U.S.C. § 284;

(e) declare this case exceptional pursuant to 35 U.S.C. § 285; and

(f) award Brazos its costs, disbursements, attorneys' fees, and such further and additional relief as is deemed appropriate by this Court.

Respectfully submitted,

Dated: August 12, 2020

Edward J. Naughton
(*pro hac vice* to be filed)
enaughton@brownrudnick.com
Rebecca MacDowell Lecaroz
(*pro hac vice* to be filed)
rlecaroz@brownrudnick.com
BROWN RUDNICK LLP
One Financial Center
Boston, Massachusetts 02111
telephone: (617) 856-8200
facsimile: (617) 856-8201

Alessandra C. Messing
(*pro hac vice* to be filed)
amessing@brownrudnick.com
Timothy J. Rousseau
(*pro hac vice* to be filed)
trousseau@brownrudnick.com
Yarelyn Mena
(*pro hac vice* to be filed)
ymena@brownrudnick.com
BROWN RUDNICK LLP
7 Times Square
New York, New York 10036
telephone: (212) 209-4800
facsimile: (212) 209-4801

Sarah G. Hartman
(*pro hac vice* to be filed)
shartman@brownrudnick.com
BROWN RUDNICK LLP
2211 Michelson Drive, 7th Floor
Irvine, California 92612
telephone: (949) 752-7100
facsimile: (949) 252-1514

/s/ Raymond W. Mort, III
Raymond W. Mort, III
Texas State Bar No. 00791308
raymort@austinlaw.com
THE MORT LAW FIRM, PLLC
100 Congress Avenue, Suite 2000
Austin, Texas 78701
Tel/Fax: 512-865-7950

Counsel for Plaintiff
WSOU Investments, LLC d/b/a
Brazos Licensing and Development