IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

PARALLEL NETWORKS LICENSING, LLC, Plaintiff, v. NEUTRONA NETWORKS INTERNATIONAL LLC, Defendant.	**Civil Action No. 6:21-cv-952** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Parallel Networks Licensing, LLC ("Parallel Networks" or "Plaintiff"), for its Complaint against Defendant Neutrona Networks International LLC (hereinafter, "Neutrona" or "Defendant"), alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff Parallel Networks is a limited liability company organized under the laws of the State of Texas with a place of business at 17440 N. Dallas Parkway, Suite 230, Dallas, Texas 75287.

3. Upon information and belief, Neutrona Networks International LLC is a corporation organized and existing under the laws of Delaware, with a place of business at 500 W. Overland Ave., Ste 310, El Paso, TX 79901. Upon information and belief, Neutrona offers and sells products and services throughout the United States, including in and from this judicial

district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in this judicial district and elsewhere in the United States.

JURISDICTION AND VENUE

4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this judicial district under 28 U.S.C. § 1400(b).

7. This Court has personal jurisdiction over the Defendant under the laws of the State of Texas, due at least to Defendant's offices within this District and its substantial business in Texas and in this judicial district, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in the State of Texas. Further, venue is proper in this district because Defendant regularly conducts business through its Austin, Texas office at 3828 Pecana Trail, Austin, Texas 78749.

BACKGROUND

The Invention

8. Keith A. Lowery is the lead inventor of the U.S. Patent No. 5,894,554 ("the '554 Patent") and related U.S. Patent No. 6,415,335 ("the '335 patent") (collectively, "the Asserted Patents"), which share a common specification. Both patents resulted from the pioneering research of Mr. Lowery in the area of server load-balancing and how websites could more efficiently and quickly process very large volumes of website visitor requests for web pages.

Mr. Lowery's research resulted in the development of a method and apparatus for "creating and managing custom Web sites."

9. For example, Mr. Lowery developed a computer-implemented method for managing a dynamic Web page generation request to a HTTP-compliant device, the computer-implemented method comprising the steps of routing the request from the HTTP-compliant device to a page server, the page server receiving the request and releasing the HTTP-compliant device to process other requests, processing the request, processing the request, the processing being performed by the page server concurrently with the HTTP-compliant device, as the HTTP-compliant device processes the other requests, and dynamically generating a Web page in response to the request, the Web page, including data dynamically retrieved from one or more data sources.

10. Figure 4 (FIG. 4) of both the Asserted Patents, set forth below, is a block diagram of a client-server system which illustrates the methods claimed in the two patents.

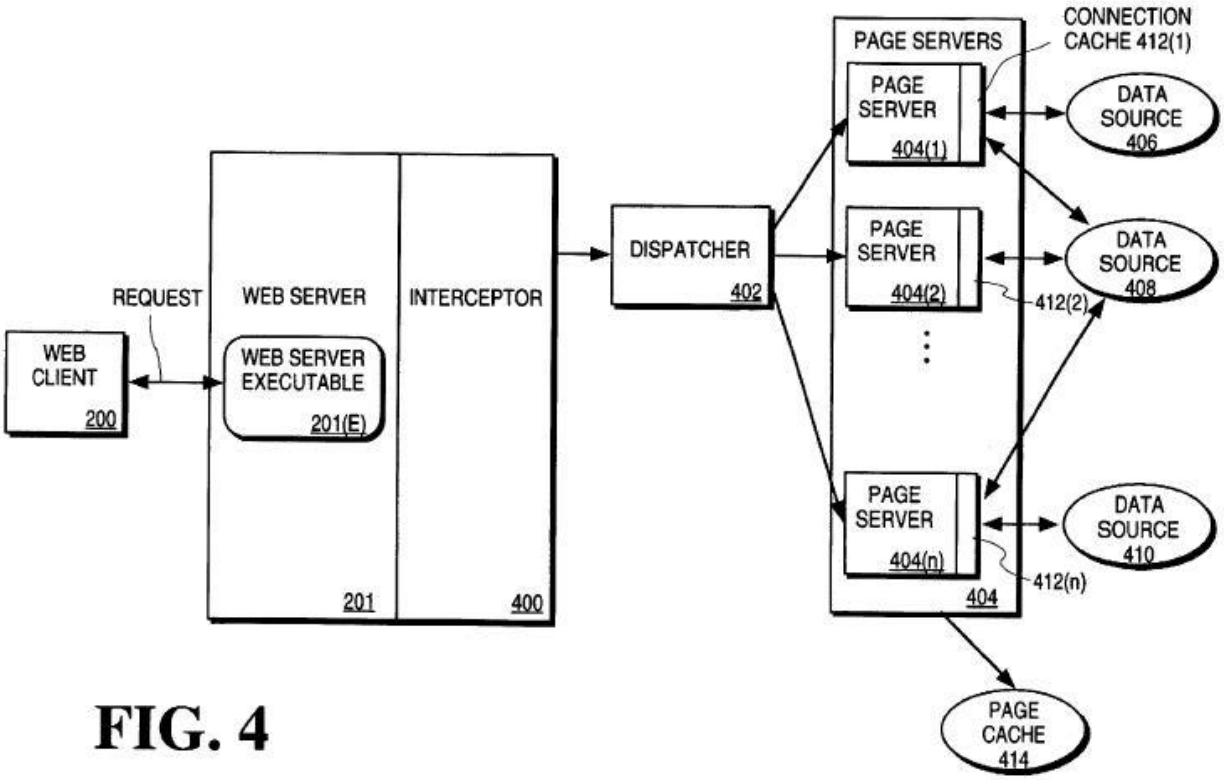

FIG. 4

11. Figure 5 (FIG. 5) of the Asserted Patents set forth below, is a flow chart which illustrates the operation of a client-server system constructed to perform the methods claimed in the Patents.

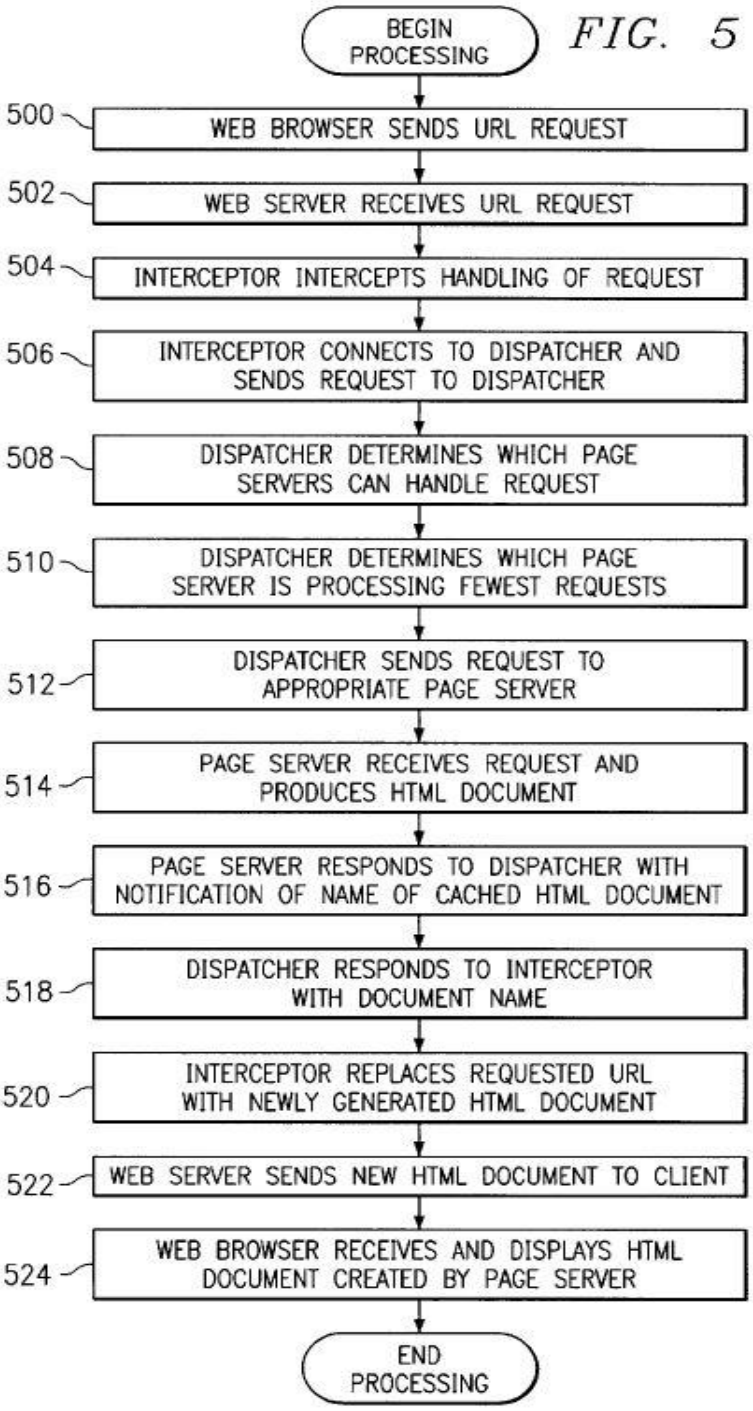
BEGIN PROCESSING
500
WEB BROWSER SENDS URL REQUEST
502
WEB SERVER RECEIVES URL REQUEST
504
INTERCEPTOR INTERCEPTS HANDLING OF REQUEST
506
INTERCEPTOR CONNECTS TO DISPATCHER AND SENDS REQUEST TO DISPATCHER
508
DISPATCHER DETERMINES WHICH PAGE SERVERS CAN HANDLE REQUEST
510
DISPATCHER DETERMINES WHICH PAGE SERVER IS PROCESSING FEWEST REQUESTS
512
DISPATCHER SENDS REQUEST TO APPROPRIATE PAGE SERVER
514
PAGE SERVER RECEIVES REQUEST AND PRODUCES HTML DOCUMENT
516
PAGE SERVER RESPONDS TO DISPATCHER WITH NOTIFICATION OF NAME OF CACHED HTML DOCUMENT
518
DISPATCHER RESPONDS TO INTERCEPTOR WITH DOCUMENT NAME
520
INTERCEPTOR REPLACES REQUESTED URL WITH NEWLY GENERATED HTML DOCUMENT
522
WEB SERVER SENDS NEW HTML DOCUMENT TO CLIENT
524
WEB BROWSER RECEIVES AND DISPLAYS HTML DOCUMENT CREATED BY PAGE SERVER
END PROCESSING

FIG. 5

Advantage Over the Prior Art

12. The patented inventions disclosed in the Asserted Patents provide many advantages over the prior art, and in particular improved the operations of web sites facing high-traffic conditions. *See* '554 Patent at col. 4, ll. 38–53, '335 Patent at col. 4, ll. 38–53; *see also, generally*, '554 Patent at col 6, ll. 49-52, '355 Patent at col. 6. ll. 49-52. One advantage of the patented invention is that it optimizes the performance of data sources by caching Web pages that are reputedly accessed, allowing subsequent requests to use the cached Web page rather than re-accessing the data source, radically improving the performance of the data source. *See* '554 Patent at col. 6, ll. 55—col. 7, ll. 7, '335 Patent at col. 6, ll. 55—col. 7, ll. 8.

13. Another advantage of the patented invention is that it allows Web site administrators to utilize multiple levels of security to manage the Web site, depending on the embodiment. *See* '554 Patent at col. 7, ll. 11—44, '335 Patent at col. 7 ll. 10—43. For example, by making use of the Web age caching ability described above an administrator can enable additional security for those sites that want to publish non-interactive content from internal information systems, but do not want real-time Internet accessibility to those internal information systems. *Id*. In this instance the Page server can act as a "replication and staging agent," and create Web pages in batches rather than in real-time, and then stored for access at a later time, even if the Page sever and dispatcher are not present or responsive later. *Id.* It is also possible in another embodiment for a Page server to take such action that it can essentially deploy a Web site via the copying of a single file, reducing other security risks. *See, id.* at col. 7, ll. 32—44, col. 7 ll. 31—43.

14. Another advantage of the patented invention is the scalability created by the dynamic nature of the load balancing, as accomplished by the Dispatcher and as modified by the Web site administrator. *See* '554 Patent at col. 8, ll. 10—51, '335 Patent at col. 8 ll. 10—51.

15. Because of these significant advantages that can be achieved through the use of the patented invention, Parallel Networks believes that the management of dynamic web page generation requests as taught in the '554 and '335 Patents is widely implemented. Indeed, the patented inventions can be used for a variety of environments where large volumes of dynamic web page requests must be optimized including, for example, server farms and cloud computing architectures.

Post-Issuance Re-Examination and Litigation History of the Asserted Patents

16. The Asserted Patents were subject to three ex-parte reexamination requests which took more than five years to complete. In July 2012, the United States Patent & Trademark Office (USPTO) issued certificates of correction which corrected erroneous claims in the *ex parte* reexamination certificates that had been issued by the USPTO for both of the Asserted Patents. All of the original claims in the '554 patent were canceled and new claims 12–49 were added. Similarly, all of the original claims in the '335 patent were canceled and new claims 30–85 were added.

17. The Asserted Patents were previously litigated in the United States District Court for the Eastern District of Texas, as well as the United States District Court for the District of Delaware. *See Parallel Networks Licensing LLC v. International Business Machines Corporation*, 1-13-cv-02072 (DED) (filed Dec. 20, 2013); *Parallel Networks Licensing LLC v. Microsoft Corporation*, 1-13-cv-02073 (DED) (filed Dec. 20, 2013); *Parallel Networks LLC v. Orbitz Worldwide Inc.*, 2-10-cv-00059 (TXED) (filed Feb. 23, 2010); *Parallel Networks LLC vs*

Saks Inc., 2-09-cv-00367 (TXED) (filed Nov. 19, 2009); *Quinstreet Inc. v. Parallel Networks, LLC*, 2-09-cv-00345 (TXED) (filed Nov. 04, 2009); *Parallel Networks, LLC v. Microsoft Corporation*, 2-09-cv-00172 (TXED) (filed May. 29, 2009); *Parallel Networks, LLC v. Priceline.Com, Inc et al.*, 2-08-cv-00045 (TXED) (filed Feb. 05, 2008); *Parallel Networks, LLC v. Netflix, Inc. et al.*, 2-07-cv-00562 (TXED) (filed Dec. 28, 2007); *epicRealm Licensing, LLC v. The Macerich Company*, 5-07-cv-00181 (TXED) (filed Dec. 03, 2007); *epicRealm Licensing, LP. v. Various, Inc.*, 2-07-cv-00030 (TXED) (filed Jan. 25, 2007); *epicRealm Licensing, LP. v. Various, Inc.*, 5-07-cv-00135 (TXED) (filed Jan. 25, 2007); *Quinstreet Inc. v. Parallel Networks, LLC*, 1-06-cv-00495 (DED) (filed Aug. 08, 2006); *Oracle Corporation et al v. Parallel Networks LLC*, 1-06-cv-00414 (DED) (filed Jun. 30, 2006); *epicRealm Licensing, LLC v. Franklin Covey Co. et al.*, 5-07-cv-00126 (TXED) (filed Aug. 05, 2005); *epicRealm Licensing, LLC v. Autoflex Leasing, Inc. et al.*, 2-05-cv-00163 (TXED) (filed May. 02, 2005); *epicRealm Licensing, LLC v. Autoflex Leasing, Inc. et al.*, 5-07-cv-00125 (TXED) (filed May. 02, 2005); *epicRealm, Licensing, LLC v. Speedera Networks, Inc.*, 2-05-cv-00150 (TXED) (filed Apr. 15, 2005) (collectively "Prior District Court Litigation").

18. The Asserted Patents have also been adjudicated in several appeals to the Federal Circuit Court of Appeals. See Oracle Corp. v. Parallel Networks, LLC, 375 F. App'x 36 (Fed. Cir. 2010); Parallel Networks Licensing v. Microsoft Corp., No. 2018-1120, 2019 U.S. App. LEXIS 19442, at *9 (Fed. Cir. June 28, 2019); Parallel Networks Licensing, LLC v. IBM, Civil Action No. 13-2072 (KAJ), 2017 U.S. Dist. LEXIS 28461, at *16-17 (D. Del. Feb. 22, 2017) (collectively, the "Federal Circuit Appeals")

19. In December 2014, Microsoft filed Inter Partes Review (IPR) petitions before the Patent Trial and Appeals Board (PTAB) of the USPTO challenging the claims of the Asserted

Patents under 35 U.S.C. §§ 102 and 103;. See Microsoft Corporation v. Parallel Networks Licensing, LLC, IPR2015-00483 (PTAB); ('554 Patent, filed Dec. 23, 2014); Microsoft Corporation v. Parallel Networks Licensing, LLC, IPR2015-00484 (PTAB) ('554 Patent, filed Dec. 23, 2014); Microsoft Corporation v. Parallel Networks Licensing, LLC, IPR2015-00485 (PTAB) ('335 Patent, filed Dec. 23, 2014); Microsoft Corporation v. Parallel Networks Licensing, LLC, IPR2015-00486 (PTAB) ('335 Patent, filed Dec. 23, 2014).

20. As to the '554 patent, the PTAB instituted reviews of claims 12–19, 32, 34, 46 and 48 in IPR2015-00483 (IPR-483) and claims 12, 20–31, 33, 35–45, 47 and 49 in IPR2015-00484. The PTAB consolidated those reviews into IPR-483, which involves claims 12–49 of the '554 patent. As to the '335 patent, the PTAB instituted reviews of claims 30–40, 43–53, and 56–85 in IPR2015-00485 (IPR-485) and claims 32, 33, 35–42, 45, 46, 48–55, 65, 69, 80, and 84 in IPR2015-00486. The PTAB consolidated those reviews in IPR-485, which involved claims 30–85 of the '335 patent. In August 2015, IBM filed IPR petitions substantially similar to the Microsoft petitions. See, International Business Machines Corp. v. Parallel Networks Licensing, LLC, IPR2015-01729 (PTAB) ('554 Patent, filed Aug. 14, 2015); International Business Machines Corp. v. Parallel Networks Licensing, LLC, IPR2015-01731 (PTAB) ('554 Patent, filed Aug. 14, 2015); International Business Machines Corp. v. Parallel Networks Licensing, LLC, IPR2015-01732 (PTAB) ('335 Patent, filed Aug. 14, 2015); International Business Machines Corp. v. Parallel Networks Licensing, LLC, IPR2015-01734 (PTAB) ('335 Patent, filed Aug. 14, 2015). The PTAB instituted reviews on the IBM petitions and joined IBM as a petitioner to IPR-483 and IPR-485 (the Microsoft and IBM IPR petitions are hereinafter collectively, the "PTAB Proceedings").

21. In its August 2016 Final Written Decision for IPR483, the PTAB concluded that

Microsoft and IBM (hereafter collectively "Petitioners") failed to demonstrate the unpatentability of claims 12–49 of the '554 patent over the cited prior art. Microsoft Corp. v. Parallel Networks Licensing, LLC, IPR2015-00483, 2016 WL 8944632, at *11 (PTAB, Aug. 11, 2016) (IPR-483 Final Decision). The PTAB reached the same conclusion in IPR-485 for claims 30–85 of the '335 patent. Microsoft Corp. v. Parallel Networks Licensing, LLC, IPR2015-00485, 2016 WL 8999702, at *10 (P.T.A.B. Aug. 11, 2016) (IPR-485 Final Decision).

22. Microsoft appealed the PTAB's Final Written Decisions to the Federal Circuit, which issued its ruling on December 1, 2017 affirming the PTAB's claim construction and rejecting certain anticipation arguments while vacating and remanding with respect to certain other invalidity arguments. Microsoft Corp. v. Parallel Networks Licensing, LLC, 715 F. App'x 1013, 1015 (Fed. Cir. 2017).

23. The Prior District Court Litigation, PTAB Proceedings, and Federal Circuit Appeals, inform the scope and construction of the claims of the Asserted Patents.

COUNT I – DEFENDANT'S INFRINGEMENT OF U.S. PATENT NO. 5,894,554

24. The allegations set forth in the foregoing paragraphs are incorporated into this First Count.

25. On April 13, 1999, the '554 Patent was duly and legally issued by the United States Patent and Trademark Office under the title "System for managing dynamic web page generation requests by intercepting request at Web server and routing to page server thereby releasing web server to process other requests[.]" A true and correct copy of the '554 Patent is attached as Exhibit A.

26. Parallel Networks is the assignee and owner of the right, title and interest in and to the ’554 Patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

27. Upon information and belief, Defendant has directly infringed one or more claims of the ’554 Patent by using, and/or providing and causing to be used products, specifically one or more servers that may load-balance among other servers, which by way of example, includes Defendant’s use of Juniper products, such as the Edge Services Director, or the use of a web server in conjunction with the same (the “Accused Instrumentalities”).

28. Upon information and belief, Defendant has directly infringed at least claim 12 of the ’554 patent by its use of Juniper products, for example, using the Edge Services Director, or by use of a web server in conjunction with the same.

29. Upon information and belief, the Accused Instrumentalities perform a computer-implemented method for managing a dynamic Web page generation request to a Web server. Juniper products like the Edge Services Director feature the ability to serve as a server that load-balances among other servers. Deployment examples from Juniper’s website demonstrating load balancing amongst application servers can be found in Exhibit B.

30. Upon information and belief, the Accused Instrumentalities route requests from a Web server to a selected page server, said selected page server receiving said request and releasing said Web server to process other requests, wherein said routing step further includes the steps of intercepting said request at said Web server, routing said request from said Web server to a dispatcher, and dispatching, by said dispatcher, said request to said selected page server. This element is met, in one non-limiting example, by the Juniper products’ use of the least-connected load-balancing method.

31. In using this method, as demonstrated in Exhibit B, the Accused Instrumentalities route a request from a Web server, and selects a page server to release the Web server from that request to process it.

32. All requests dispatched from the Accused Instrumentalities are concurrently received and processed by one of the page server machines as chosen, in this example, by the method of determining which has the least active connections. The web server resources, including, but not limited to, memory, and a CPU associated with the particular task, duty or obligations in processing this request are thereby freed.

33. Upon information and belief, the Accused Instrumentalities process requests, wherein such processing is performed by a selected page server while the Web server concurrently processes other requests. This element is met by the Juniper products such as the Edge Services Director, as in using methods of load-balancing like the least-connected method, the routing of a new request necessarily depends on the number of current active transactions at the page server level.

34. Upon information and belief, the Accused Instrumentalities, in response to a request, a selected page server retrieves data from one or more sources and aids in the generation of dynamic web pages. Much of Juniper's documentation describes dynamically retrieved content as being retrieved from databases, but also from on-board caches when such data has already been recently accessed.

35. Upon information and belief, the Accused Instrumentalities utilize a form of dispatching such that it includes examining a request to make a selection of which page server should process said request from among a plurality of page servers that can each generate said Web page requested by said request, selecting one of said plurality of page servers to

dynamically generate said Web page, wherein such selection is based on examining dynamic information regarding a load associated with each of the plurality of page servers and sending said request to said selected page server based on this examination.

36. This dispatching element is satisfied by the use of Juniper products such as the Edge Services Director, as they examine requests to make selections of page servers—each of which is capable of generating the Web page—based on information regarding the load associated with each page server.

37. Parallel Networks has been harmed by Defendant's infringing activities.

COUNT II – DEFENDANT'S INFRINGEMENT OF U.S. PATENT NO. 6,415,335

38. The allegations set forth in the foregoing paragraphs are incorporated into this Second Count.

39. On July 2, 2002, the '335 Patent was duly and legally issued by the United States Patent and Trademark Office under the title "System and method of managing dynamic web page generation requests[.]" A true and correct copy of the '335 Patent is attached as Exhibit C.

40. Parallel Networks is the assignee and owner of the right, title and interest in and to the '335 Patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

41. Upon information and belief, Defendant has directly infringed one or more claims of the '335 Patent by using, and/or providing and causing to be used products, specifically one or more servers that may load-balance among other servers, which by way of example, includes Defendant's use of Juniper products, such as the Edge Services Director, or the use of a web server in conjunction with the same (the "Accused Instrumentalities").

42. Upon information and belief, Defendant has directly infringed at least claim 43 of the ’335 patent by its use of Juniper products such as the Edge Services Director, or by use of a web server in conjunction with the same.

43. Upon information and belief, the Accused Instrumentalities transfers requests from a HTTP-compliant device to a selected page server, said selected page server being selected from among a plurality of page servers, and receiving said request and releasing said HTTP-compliant device to process other requests, wherein said transferring step further includes the steps of intercepting said request at said HTTP-compliant device, selecting said page server from among a plurality of page servers that can each process the request based on dynamic information maintained for each of said plurality of page servers, and then transferring said request from said HTTP-compliant device to the selected page server. This element is met, in one non-limiting example, by Juniper products’ use of the least-connected load-balancing method.

44. In using this method, as demonstrated in Exhibit D, the Accused Instrumentalities transfer a request from a HTTP-compliant device, and select a page server to release the HTTP-compliant device from that request to process it.

45. All requests transferred from the Accused Instrumentalities are concurrently received and processed by one of the page server machines as chosen, in this example, by the method of determining which has the least active connections. The HTTP-compliant device resources, including, but not limited to, memory, and a CPU associated with the particular task, duty or obligations in processing this request are thereby freed.

46. Upon information and belief, the Accused Instrumentalities process requests, wherein such processing is performed by a selected page server while the HTTP-compliant

device concurrently processes other requests. This element is met by Juniper products such as the Edge Services Director, as in using methods of load-balancing like the least-connected method, the routing of a new request necessarily depends on the number of current active transactions at the page server level.

47. Upon information and belief, the Accused Instrumentalities, in response to a request, a selected page server retrieves data from one or more sources and aids in the generation of dynamic web pages. Much of Juniper's documentation describes dynamically retrieved content as being retrieved from databases, but also from on-board caches when such data has already been recently accessed.

48. Parallel Networks has been harmed by Defendant's infringing activities.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Parallel Networks demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Parallel Networks demands judgment for itself and against Defendant as follows:

A. An adjudication that Defendant has infringed the '554 and '335 Patents;

B. An award of damages to be paid by Defendant adequate to compensate Parallel Networks, LLC for Defendant's past infringement of the '554 and '335 Patents, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and

D. An award to Parallel Networks of such further relief at law or in equity as the Court deems just and proper.

Dated: September 13, 2021

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