

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

PARITY NETWORKS, LLC,	§
	§ CIVIL ACTION NO. 6:16-cv-01306
<i>Plaintiff,</i>	§
	§
v.	§ JURY TRIAL DEMANDED
	§
HUAWEI TECHNOLOGIES USA, INC.,	§
	§
<i>Defendant.</i>	§

ORIGINAL COMPLAINT AGAINST HUAWEI TECHNOLOGIES USA, INC.

Plaintiff Parity Networks, LLC (“Plaintiff” or “Parity Networks”), by and through its attorneys, for its First Complaint against Huawei Technologies USA, Inc. (“Defendant” or “Huawei”), and demanding trial by jury, hereby alleges as follows:

I. 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. §§ 271, *et seq.*, to enjoin and obtain damages resulting from Defendant’s unauthorized use, sale, and offer to sell in the United States of products, methods, processes, services and/or systems that infringe Parity Networks’ United States patents, as described herein.

2. Huawei manufactures, provides, uses, sells, offers for sale, imports, and/or distributes infringing products and services; and encourages others to use its products and services in an infringing manner, including their customers, as set forth herein.

3. Parity Networks seeks past and future damages and prejudgment and post judgment interest for Huawei’s past infringement of the Patents-in-Suit, as defined below.

II. PARTIES

4. Plaintiff Parity Networks is a limited liability company organized and existing under the laws of the State of Texas. Parity Networks' registered agent for service of process in Texas is InCorp Services, Inc., 815 Brazos Street, Suite 500, Austin, Texas 78701.

5. On information and belief, Defendant Huawei is a corporation organized under the laws of the State of Texas, having a principal place of business at 5700 Tennyson Parkway, Suite 500, Plano, Texas 75024. Huawei's registered agent for service of process in Texas is CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

III. JURISDICTION AND VENUE

6. This is an action for patent infringement which arises under the Patent Laws of the United States, in particular, 35 U.S.C. §§ 271, 281, 283, 284 and 285.

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

8. On information and belief, venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b) because Defendant has transacted business in this district, and has committed and/or induced acts of patent infringement in this district.

9. On information and belief, Defendant Huawei is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business in this forum, 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 Texas and in this Judicial District.

IV. FACTUAL ALLEGATIONS

PATENTS-IN-SUIT

10. Parity Networks is the owner of all right, title and interest in and to U.S. Patent No. 6,252,848 (the “848 Patent”), entitled “System Performance in a Data Network Through Queue Management Based on Ingress Rate Monitoring,” issued on June 26, 2001.

11. Parity Networks is the owner of all right, title and interest in and to U.S. Patent No. 6,738,378 (the “378 Patent”), entitled “Method and Apparatus for Intelligent Determination of Data Packets Destined to a Central Processing Unit of a Router or Server on a Data Packet Network,” issued on May 18, 2004.

12. Parity Networks is the owner of all right, title and interest in and to U.S. Patent No. 6,763,394 (the “394 Patent”), entitled “Virtual Egress Packet Classification at Ingress,” issued on July 13, 2004.

13. Parity Networks is the owner of all right, title and interest in and to U.S. Patent No. 7,002,958 (the “958 Patent”), entitled “Method for Load-Balancing With FIFO Guarantees in Multipath Networks,” issued on February 21, 2006.

14. Parity Networks is the owner of all right, title and interest in and to U.S. Patent No. 7,103,046 (the “046 patent”), entitled “Method and Apparatus for Intelligent Sorting and Process Determination of Data Packets Destined to a Central Processing Unit of a Router or Server on a Data Packet Network,” issued on September 5, 2006.

15. Parity Networks is the owner of all right, title and interest in and to U.S. Patent No. 7,107,352 (the “352 Patent”), entitled “Virtual Egress Packet Classification at Ingress,” issued on September 12, 2006.

16. Together, the foregoing patents are referred to herein as the “Patents-in-Suit.” Parity Networks is the assignee of the Patents-in-Suit, and has all rights to sue for infringement and collect past and future damages for the infringement thereof.

Defendant’s Acts

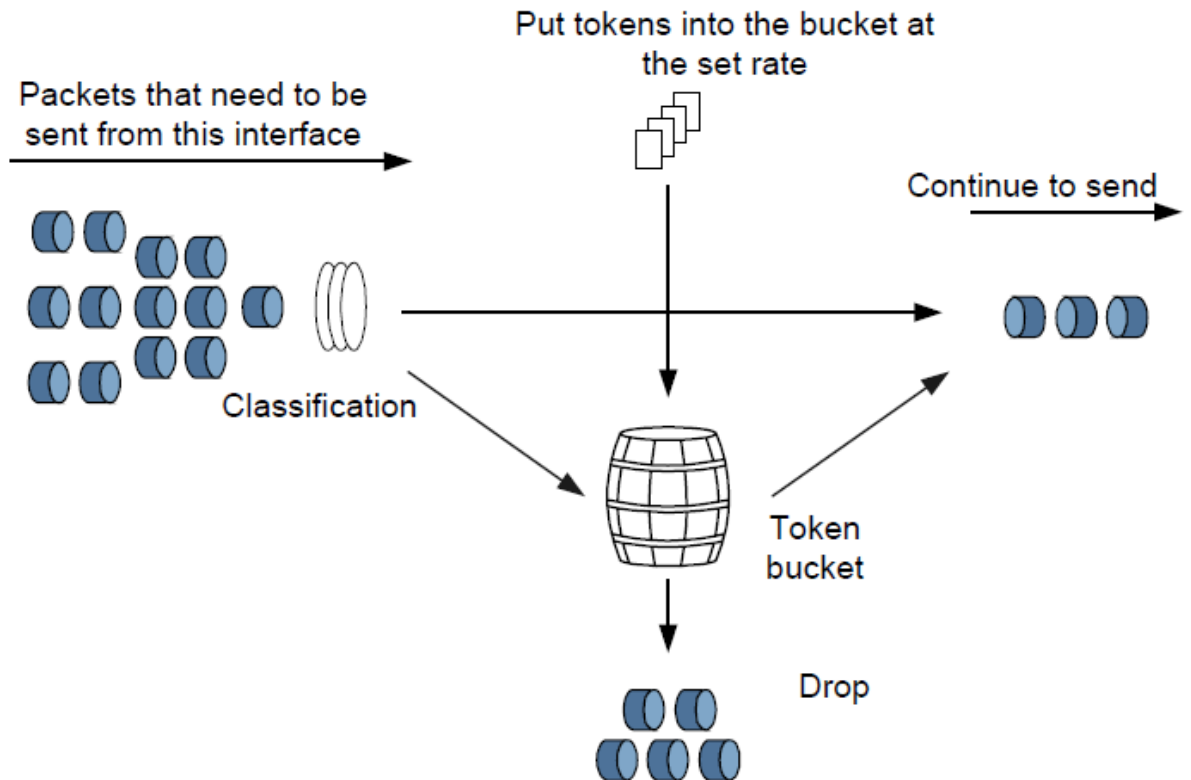
17. Defendant Huawei provides software and services directed to detection, analysis and monitoring of data flow in a data network environment.

18. For example, Huawei provides the S5700-HI Series Advanced Gigabit Switches. These switches provide L2 and L3 switching for data centers and enterprise networks, including VPN tunnel support and IPv6 support.

19. Huawei’s switches further include multiple ports with output queues. The ingress ports are configured to receive packets from multiple flows, and provide traffic policing based on a traffic classifier.

20. Traffic policing based on a traffic classifier limits the rate of the traffic matching a traffic classifier. For example, the S5700 limits the rate of incoming traffic. It discards the traffic that exceeds the rate limit, limits traffic within an appropriate range, and protects network resources and carriers' interests. Traffic policing based on a traffic classifier uses dual token buckets.

Figure 2-1 Using a token bucket to measure the traffic



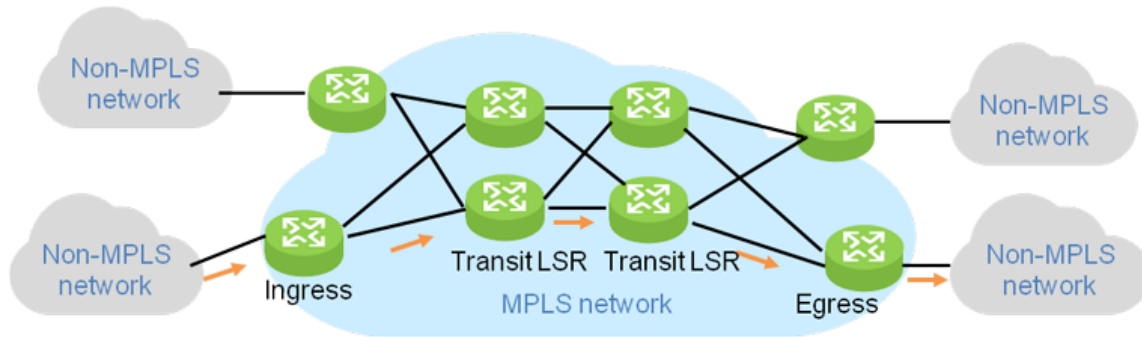
Quidway S5700 Series Ethernet Switches, Configuration Guide QoS (July 20, 2012), p. 59.

21. Huawei further provides the Huawei AR150, 200, 1200, 2200 & 3200 Series Enterprise Routers. These are fixed interface access routers providing routing and switching functionality for branch offices and small businesses. They are available with four or eight Fast Ethernet (FE) ports and two uplink ports for load balancing and link protection; total capacity 100 Mbit/s to 150 Mbit/s. See <http://e.huawei.com/us/products/enterprise-networking/routers/ar-g3/ar150-160-200>.

22. The routers described above provide Multiprotocol Label Switching (MPLS). A typical configuration is shown below.

Typical MPLS Network Structure

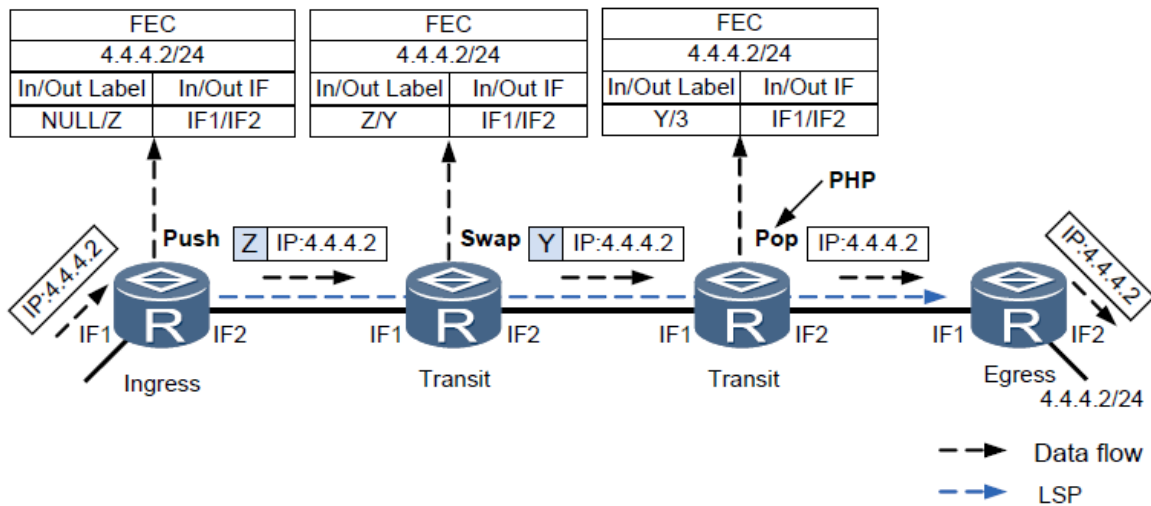
The following figure illustrates the typical MPLS network structure.



<http://forum.huawei.com/thread-128541-1-1.html>.

23. The Huawei routers employ MPLS by analyzing packet headers at the edge of the network. Labels are used to identify FECs to which packets belong to expedite forwarding as shown below:

Figure 1-6 Basic MPLS forwarding process



As shown in **Figure 1-6**, the LSRs have distributed MPLS labels and set up an LSP with the destination address of 4.4.4.2/24. MPLS packets are forwarded as follows:

1. The ingress node receives an IP packet destined for 4.4.4.2. Then, the ingress node adds Label Z to the packet and forwards it.
2. When the downstream transit node receives the labeled packet, the node pops out Label Z and pushes Label Y into the packet.
3. When the transit node at the penultimate hop receives the packet with Label Y, the node pops out Label Y because the label value is 3. The transit node then forwards the packet to the egress node as an IP packet.
4. The egress node receives the IP packet and forwards it to 4.4.4.2/24.

Huawei AR150&200&1200&2200&3200 Series Enterprise Routers Configuration Guide—MPLS Configuration (Jan. 16, 2014), p. 9.

24. On information of belief, Defendant Huawei also implements contractual protections in the form of license and use restrictions with its customers to preclude the unauthorized reproduction, distribution and modification of its software. Moreover, on information and belief, Defendant Huawei implements technical precautions to attempt to thwart customers who would circumvent the intended operation of Huawei's products.

V. COUNTS OF PATENT INFRINGEMENT

COUNT ONE INFRINGEMENT OF U.S. PATENT NO. 6,252,848

25. Parity Networks incorporates by reference its allegations in Paragraphs 1-24 as if fully restated in this paragraph.

26. Parity Networks is the assignee and owner of all right, title and interest to the '848 Patent. Parity Networks has the legal right to enforce the patent, sue for infringement, and seek equitable relief and damages.

27. On information and belief, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently directly infringing at least claim 15 of the '848

Patent, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, selling and offering for sale methods and articles infringing one or more claims of the '848 Patent. Defendant Huawei is thus liable for direct infringement of the '848 Patent pursuant to 35 U.S.C. § 271(a). Exemplary infringing products include the S5700-HI Series Advanced Gigabit Switches, which include multiple ports with output queues and the ingress ports are configured to receive packets from multiple flows.

28. On information and belief, at least since the filing of this Complaint, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently indirectly infringing at least claim 15 of the '848 Patent, including actively inducing infringement of the '848 Patent under 35 U.S.C. § 271(b). Such inducements include without limitation, with specific intent to encourage the infringement, knowingly inducing consumers to use infringing articles and methods that Huawei knows or should know infringe one or more claims of the '848 Patent. Huawei instructs its customers to make and use the patented inventions of the '848 Patent by operating Huawei's products in accordance with Huawei's specifications. Huawei specifically intends its customers to infringe by implementing its Ethernet Switches to perform traffic policing based on a traffic classifier in an infringing manner, as set forth above.

29. As a result of Huawei's infringement of the '848 Patent, Parity Networks has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

COUNT TWO
INFRINGEMENT OF U.S. PATENT NO. 6,738,378

30. Parity Networks incorporates by reference its allegations in Paragraphs 1-29 as if fully restated in this paragraph.

31. Parity Networks is the assignee and owner of all right, title and interest to the '378 Patent. Parity Networks has the legal right to enforce the patent, sue for infringement, and seek equitable relief and damages.

32. On information and belief, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently directly infringing at least

33. 1 of the '378 Patent, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, selling and offering for sale methods and articles infringing one or more claims of the '378 Patent. Defendant Huawei is thus liable for direct infringement of the '378 Patent pursuant to 35 U.S.C. § 271(a). Exemplary infringing products include the S5700-HI Series Advanced Gigabit Switches, which include a network node that uses a Forwarding Chip (FED) for managing specific types of packets that are processed by the CPU.

34. On information and belief, at least since the filing of this Complaint, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently indirectly infringing at least claim 1 of the '378 Patent, including actively inducing infringement of the '378 Patent under 35 U.S.C. § 271(b). Such inducements include without limitation, with specific intent to encourage the infringement, knowingly inducing consumers to use infringing articles and methods that Huawei knows or should know infringe one or more claims of the '378 Patent. Huawei instructs its customers to make and use the patented inventions of the '378 Patent by operating Huawei's products in accordance with Huawei's specifications. Huawei specifically intends its customers to infringe by implementing its Ethernet Switches to perform traffic policing based on a traffic classifier in an infringing manner, as set forth above.

35. As a result of Huawei's infringement of the '378 Patent, Parity Networks has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

COUNT THREE
INFRINGEMENT OF U.S. PATENT NO. 6,763,394

36. Parity Networks incorporates by reference its allegations in Paragraphs 1-35 as if fully restated in this paragraph.

37. Parity Networks is the assignee and owner of all right, title and interest to the '394 Patent. Parity Networks has the legal right to enforce the patent, sue for infringement, and seek equitable relief and damages.

38. On information and belief, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently directly infringing at least claim 13 of the '394 Patent, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, selling and offering for sale methods and articles infringing one or more claims of the '394 Patent. Defendant Huawei is thus liable for direct infringement of the '394 Patent pursuant to 35 U.S.C. § 271(a). Exemplary infringing products include the S5700-HI Series Advanced Gigabit Switches, which includes an Advanced ACL feature that allows filtering and dropping of packets based on various criteria including the egress port.

39. On information and belief, at least since the filing of this Complaint, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently indirectly infringing at least claim 13 of the '394 Patent, including actively inducing infringement of the '394 Patent under 35 U.S.C. § 271(b). Such inducements include without limitation, with specific intent to encourage the infringement, knowingly inducing consumers to use infringing articles and methods that Huawei knows or should know infringe one or more

claims of the '394 Patent. Huawei instructs its customers to make and use the patented inventions of the '394 Patent by operating Huawei's products in accordance with Huawei's specifications. Huawei specifically intends its customers to infringe by implementing its Ethernet Switches to perform traffic policing based on a traffic classifier in an infringing manner, as set forth above.

40. As a result of Huawei's infringement of the '394 Patent, Parity Networks has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

COUNT FOUR
INFRINGEMENT OF U.S. PATENT NO. 7,002,958

41. Parity Networks incorporates by reference its allegations in Paragraphs 1-40 as if fully restated in this paragraph.

42. Parity Networks is the assignee and owner of all right, title and interest to the '958 Patent. Parity Networks has the legal right to enforce the patent, sue for infringement, and seek equitable relief and damages.

43. On information and belief, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently directly infringing at least claim 1 of the '958 Patent, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, selling and offering for sale methods and articles infringing one or more claims of the '958 Patent. Defendant Huawei is thus liable for direct infringement of the '958 Patent pursuant to 35 U.S.C. § 271(a). Exemplary infringing products include the Huawei AR150, 200, 1200, 2200 & 3200 Series Enterprise Routers, which support Multipath Label Switching (MPLS), and allocate labels to packets to establish a label switched path (LSP).

44. On information and belief, at least since the filing of this Complaint, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently indirectly infringing at least claim 1 of the '958 Patent, including actively inducing infringement of the '958 Patent under 35 U.S.C. § 271(b). Such inducements include without limitation, with specific intent to encourage the infringement, knowingly inducing consumers to use infringing articles and methods that Huawei knows or should know infringe one or more claims of the '958 Patent. Huawei instructs its customers to make and use the patented inventions of the '958 Patent by operating Huawei's products in accordance with Huawei's specifications. Huawei specifically intends its customers to infringe by implementing its Enterprise Routers to perform MPLS in an infringing manner, as set forth above.

45. As a result of Huawei's infringement of the '958 Patent, Parity Networks has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

COUNT FIVE
INFRINGEMENT OF U.S. PATENT NO. 7,103,046

46. Parity Networks incorporates by reference its allegations in Paragraphs 1-45 as if fully restated in this paragraph.

47. Parity Networks is the assignee and owner of all right, title and interest to the '046 Patent. Parity Networks has the legal right to enforce the patent, sue for infringement, and seek equitable relief and damages.

48. On information and belief, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently directly infringing at least claim 1 of the '046 Patent, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, selling and offering for sale methods and articles infringing one or more claims of the '046

Patent. Defendant Huawei is thus liable for direct infringement of the '046 Patent pursuant to 35 U.S.C. § 271(a). Exemplary infringing products include the S5700-HI Series Advanced Gigabit Switches, which categorize incoming data for processing based on a source address. Exemplary infringing features include attack tracing and defense mechanisms, which categorize traffic sources and process traffic according at least in part to this categorization.

49. On information and belief, at least since the filing of this Complaint, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently indirectly infringing at least claim 1 of the '046 Patent, including actively inducing infringement of the '046 Patent under 35 U.S.C. § 271(b). Such inducements include without limitation, with specific intent to encourage the infringement, knowingly inducing consumers to use infringing articles and methods that Huawei knows or should know infringe one or more claims of the '046 Patent. Huawei instructs its customers to make and use the patented inventions of the '046 patent by operating Huawei's products in accordance with Huawei's specifications. Huawei specifically intends its customers to infringe by implementing its Ethernet Switches to perform traffic policing based on a traffic classifier in an infringing manner, as set forth above.

50. As a result of Huawei's infringement of the '046 Patent, Parity Networks has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

COUNT SIX
INFRINGEMENT OF U.S. PATENT NO. 7,107,352

51. Parity Networks incorporates by reference its allegations in Paragraphs 1-50 as if fully restated in this paragraph.

52. Parity Networks is the assignee and owner of all right, title and interest to the '352 Patent. Parity Networks has the legal right to enforce the patent, sue for infringement, and seek equitable relief and damages.

53. On information and belief, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently directly infringing at least claim 1 of the '352 Patent, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, selling and offering for sale methods and articles infringing one or more claims of the '352 Patent. Defendant Huawei is thus liable for direct infringement of the '352 Patent pursuant to 35 U.S.C. § 271(a). Exemplary infringing products include the S5700-HI Series Advanced Gigabit Switches, which include an Advanced ACL feature that allows filtering and dropping of packets based on various criteria including an egress port.

54. On information and belief, at least since the filing of this Complaint, Defendant Huawei, without authorization or license from Parity Networks, has been and is presently indirectly infringing at least claim 1 of the '352 Patent, including actively inducing infringement of the '352 Patent under 35 U.S.C. § 271(b). Such inducements include without limitation, with specific intent to encourage the infringement, knowingly inducing consumers to use infringing articles and methods that Huawei knows or should know infringe one or more claims of the '352 Patent. Huawei instructs its customers to make and use the patented inventions of the '352 Patent by operating Huawei's products in accordance with Huawei's specifications. Huawei specifically intends its customers to infringe by implementing its Ethernet Switches to perform traffic policing based on a traffic classifier in an infringing manner, as set forth above.

55. As a result of Huawei's infringement of the '352 Patent, Parity Networks has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

VI. JURY DEMAND

56. Plaintiff Parity Networks demands a trial by jury of all matters to which it is entitled to trial by jury, pursuant to FED. R. CIV. P. 38.

VII. PRAYER FOR RELIEF

WHEREFORE, Parity Networks prays for judgment and seeks relief against Defendant as follows:

- A. That the Court determine that one or more claims of the Patents-in-Suit is infringed by Defendant Huawei, either literally or under the doctrine of equivalents;
- B. That the Court award damages adequate to compensate Parity Networks for the patent infringement that has occurred, together with prejudgment and post-judgment interest and costs, and an ongoing royalty for continued infringement;
- C. That the Court permanently enjoin Defendant pursuant to 35 U.S.C. § 283; and
- D. That the Court award such other relief to Parity Networks as the Court deems just and proper.

DATED: November 18, 2016

Respectfully submitted,
/s/ Andrew G. DiNovo
Andrew G. DiNovo
Texas State Bar No. 00790594
adinovo@dpelaw.com
Adam G. Price
Texas State Bar No. 24027750
aprice@dpelaw.com
Daniel L. Schmid

Texas State Bar No. 24093118
dschmid@dpelaw.com

**DINOVO PRICE ELLWANGER &
HARDY LLP**

7000 N. MoPac Expressway, Suite 350
Austin, Texas 78731
Telephone: (512) 539-2626
Telecopier: (512) 539-2627

Counsel for Plaintiff Parity Networks, LLC