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

# PACKET INTELLIGENCE LLC,

Plaintiff,

v.

Civil Action No.

JURY TRIAL DEMANDED

SANDVINE INCORPORATED ULC,

SANDVINE CORPORATION, and

Defendants.

# PACKET INTELLIGENCE LLC'S COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Packet Intelligence LLC ("Packet Intelligence" or "Plaintiff"), by and through its undersigned attorneys hereby demands a jury trial and alleges the following in support of its Complaint for patent infringement against Defendants Sandvine Corporation and Sandvine Incorporated ULC (collectively, "Sandvine," "Sandvine Defendants," or "Defendants"):

# THE PARTIES

 Plaintiff Packet Intelligence is a limited liability company existing under the laws of Texas with its principal place of business at 505 East Travis Street Suite 209, Marshall, TX 75670.

 Defendant Sandvine Corporation is a corporation organized and existing under the laws of Ontario, Canada, with its registered principal office at 408 Albert Street, Waterloo, Ontario, Canada, N2L 3V3. The shares of Sandvine Corporation are publicly traded on the Toronto Stock Exchange. 3. Defendant Sandvine Incorporated ULC is a corporation organized and existing under the laws of Alberta, Canada. It is a wholly owned "operating subsidiary" of Defendant Sandvine Corporation, and lists the same mailing address and headquarters as its corporate parent, at 408 Albert Street, Waterloo, Ontario, Canada, N2L 3V3.

### JURISDICTION AND VENUE

4. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the Patent Laws of the United States, 35 U.S.C. § 1 et seq.

5. This Court has personal jurisdiction over the Sandvine Defendants, who have conducted and continue to conduct business within the State of Texas, and within the Eastern District of Texas. The Sandvine Defendants directly and/or through intermediaries (including distributors, sales agents, and others), ship, distribute, offer for sale, sell, advertise, and/or use their products (including, but not limited to, the products that are accused of patent infringement in this lawsuit) in the United States, the State of Texas, and the Eastern District of Texas. The Sandvine Defendants have committed patent infringement within the State of Texas, and, more particularly, within the Eastern District of Texas as alleged in more detail below.

6. Venue is proper in this federal district under 28 U.S.C. §§ 1391(b) and (c). On information and belief, Defendant has transacted business in this district and has committed acts of patent infringement in this district.

7. On information and belief arising from Sandvine personnel "LinkedIn" advertisements, from August 2006 to January 2011, Sandvine's "Director Strategic Accounts" resided in or near this district, and from January 2011 to the present, Sandvine's "Regional Vice President Sales, U.S.," has resided in or near this district.

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8. On information and belief arising from Sandvine personnel "LinkedIn" advertisements, Sandvine's "Sales Engineering Director, CALA" has resided in or near this district from July 2010 to the present.

9. A "Comprehensive Business Report" from LexisNexis discloses two addresses for Sandvine Corp. located within Collin County in this judicial district, which both appear to be related to Sandvine Corp. worker compensation coverage. (*See* Exhibits 1 and 2). On information and belief, the Sandvine Corp. referred to in these LexisNexis reports refer to one more of the Sandvine Defendants.

10. On information and belief, Sandvine has and does regularly promote, offer to sell, sell, and use infringing products and technology throughout Texas, including in and near this district. Sandvine has also sold infringing products and technology to customers for use within Texas, and within this district.

11. On information and belief arising from press releases, Sandvine has and/or had a business relationship with Peoples Telephone Cooperative—a Quitman, Texas-based company to which Sandvine provided IP service control platform technology. Quitman, Texas is located within this judicial district.

12. On information and belief arising from press releases, Sandvine has sold its accused Policy Traffic Switch and Policy Engine technology to SpeedConnect, which maintains its regional office in San Angelo, Texas and serves customers with wireless broadband Internet, DISH TV and telephone service in Texas.

13. On information and belief arising from press releases, Sandvine itself has promoted and demonstrated its internet and cloud services controller technology in Texas,

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including for example at the 2015 MEF Global Ethernet Networking (GEN15) conference at the Omni Hotel in Dallas, Texas.

14. On information and belief arising from press reports and Sandvine regulatory disclosures, Sandvine's customers for the accused infringing technology include five of the top six—and eight of the top ten—cable operators in North America. On information and belief, Sandvine supplies its cable operator customers with infringing technology that is offered for sale, sold and/or used throughout Texas, including in this district.

15. The Sandvine Defendants operate an interactive website at www.sandvine.com that is accessible in Texas and this district. This website advertises and promotes Sandvine's accused Policy Traffic Switch (PTS) and Policy Engine (PE) products. The webpages describing Sandvine's PTS and PE products contain hyperlinks to connect with Sandvine staff so that Sandvine can discuss its PTS and PE products with customers and/or potential customers. The Sandvine website's PTS and PE product literature also separately contains information to directly contact Sandvine's sales staff.

16. All of the patents asserted in this Complaint were previously asserted in a lawsuit filed in this district on March 12, 2013, in *Packet Intelligence, LLC v. Huawei Device USA Inc., et al*, Case No. 2:13-cv-00206-JRG-RSP (E.D. Tex.). The case was dismissed by agreement of the parties on March 4, 2014 (Dkts. 53 and 54).

17. All of the patents asserted in this Complaint were previously asserted in a lawsuit filed in this district on March 24, 2014, in *Packet Intelligence LLC v. Cisco Systems Inc.*, Case No. 2:14-cv-00252-JRG (E.D. Tex.). The case was dismissed by agreement of the parties on March 2, 2015 (Dkt. 106).

#### THE ASSERTED PATENTS-IN-SUIT

18. On November 18, 2003, the United States Patent and Trademark Office (USPTO) duly and legally issued U.S. Patent No. 6,651,099 ("the '099 Patent") entitled "Method and Apparatus for Monitoring Traffic in a Network." Packet Intelligence owns all substantial rights to the '099 Patent, including the right to sue and recover damages for all infringement thereof. Documents assigning the '099 Patent to Packet Intelligence were recorded at the USPTO on February 1, 2013 at Reel/Frame 29737-613. Attached hereto as Exhibit 3 is a true and correct copy of the '099 Patent.

19. The '099 patent has been cited as pertinent prior art by either an applicant, or a USPTO examiner, during the prosecution of more than 275 issued patents and published patent applications, including during the prosecution of patent applications filed by Alcatel Lucent, AT&T, Broadcom, Cisco, Ericsson, F5 Networks, Fortinet, Hewlett-Packard, IBM, Intel, Juniper Networks, McAfee, Microsoft, Nokia, Samsung, Sonus Networks, Symantec, Verizon, VMware, and the United States of America as represented by the National Security Agency.

20. On December 16, 2003, the USPTO duly and legally issued U.S. Patent No. 6,665,725 ("the '725 Patent") entitled "Processing Protocol Specific Information in Packets Specified by a Protocol Description Language." Packet Intelligence owns all substantial rights to the '725 Patent, including the right to sue and recover damages for all infringement thereof. Documents assigning the '725 Patent to Packet Intelligence were recorded at the USPTO on February 1, 2013 at Reel/Frame 29737-613. A true and correct copy of the '725 Patent is attached hereto as Exhibit 4.

21. The '725 patent has been cited as pertinent prior art by either an applicant, or a USPTO examiner, during the prosecution of more than 260 issued patents and published patent

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applications, including during the prosecution of patent applications filed by Alcatel Lucent, Amazon, AT&T, Avaya, Broadcom, Cisco, F5 Networks, Finisar, Fortinet, Fujitsu, Huawei, Hewlett-Packard, IBM, Intel, Juniper Networks, McAfee, Microsoft, Nokia, Sandvine, Sun Microsystems, and Symantec.

22. On August 3, 2004, the USPTO duly and legally issued U.S. Patent No. 6,771,646 ("the '646 Patent") entitled "Associative Cache Structure for Lookups and Updates of Flow Records in a Network Monitor." Packet Intelligence owns all substantial rights to the '646 Patent, including the right to sue and recover damages for all infringement thereof. Documents assigning the '646 Patent to Packet Intelligence were recorded at the USPTO on February 1, 2013 at Reel/Frame 29737-613. A true and correct copy of the '646 Patent is attached hereto as Exhibit 5.

23. The '646 patent has been cited as pertinent prior art by either an applicant, or a USPTO examiner, during the prosecution of more than 170 issued patents and published patent applications, including during the prosecution of patent applications filed by AT&T, Avaya, Broadcom, Cisco, Dell, Hewlett-Packard, IBM, Intel, Juniper Networks, Lucent, McAfee, Oracle, Nokia, Nortel Networks, Sun Microsystems, Symantec, and Tektronix.

24. On January 4, 2005, the USPTO duly and legally issued U.S. Patent No. 6,839,751 ("the '751 Patent") entitled "Re-Using Information from Data Transactions for Maintaining Statistics in Network Monitoring." Packet Intelligence owns all substantial rights to the '751 Patent, including the right to sue and recover damages for all infringement thereof. Documents assigning the '751 Patent to Packet Intelligence were recorded at the USPTO on February 1, 2013 at Reel/Frame 29737-613. A true and correct copy of the '751 Patent is attached hereto as Exhibit 6.

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25. The '751 patent has been cited as pertinent prior art by either an applicant, or a USPTO examiner, during the prosecution of more than 100 issued patents and published patent applications, including during the prosecution of patent applications filed by AT&T, Avaya, Ciena, Cisco, Hewlett-Packard, IBM, Intel, McAfee, Microsoft, NEC, Oracle, Nortel Networks, Sun Microsystems, and VMware.

26. On October 11, 2005, the USPTO duly and legally issued U.S. Patent No. 6,954,789 ("the '789 Patent") entitled "Method and Apparatus for Monitoring Traffic in a Network." Packet Intelligence owns all substantial rights to the '789 Patent, including the right to sue and recover damages for all infringement thereof. Documents assigning the '789 Patent to Packet Intelligence were recorded at the USPTO on February 1, 2013 at Reel/Frame 29737-613. A true and correct copy of the '789 Patent is attached hereto as Exhibit 7.

27. The '789 patent has been cited as pertinent prior art by either an applicant, or a USPTO examiner, during the prosecution of more than 90 issued patents and published patent applications, including during the prosecution of patent applications filed by Alcatel Lucent, AT&T, Finisar, Fujitsu, Georgia Tech Research Institute, Google, Hewlett-Packard, IBM, Intel, McAfee, Microsoft, and Motorola.

28. The patents-in-suit are early pioneer patents in the field of network traffic processing and monitoring. Each of the asserted patents claim priority to provisional U.S. Patent Application No. 60/141,903 entitled "Method and Apparatus for Monitoring Traffic in a Network," filed in the United States Patent and Trademark Office on June 30, 1999.

29. As just one measure of the pioneering status of the asserted patents, collectively they have been cited as pertinent prior art by USPTO examiners and industry leading patent

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applicants during the prosecution of more than 900 issued patents and published patent applications filed with the USPTO.

30. Mr. Russell S. Dietz, the first listed inventor on four of the five patents-in-suit is a recognized thought leader who publishes and lectures regularly on network data management, cloud computing and virtualization security solutions. Bloomberg's Executive Profile for Mr. Dietz notes that he "has more than 30 years of experience in the technology and security space. He has a proven record of success as Chief Technology Officer of multiple hardware, software and systems security companies, and is a recognized pioneer and innovator in cloud computing and virtualization security solutions. . . He has more than 20 years of leadership and expertise anticipating trends, and evaluating new technologies in data communications, data management and Enterprise security. . . . He is an active member of the Internet and Engineering Task Force (IETF), Optical Internetworking Forum (OIF) and the Cloud Computing Interoperability Forum (CCIF)."

31. While the applications that matured into the patents-in-suit were pending, Mr. Dietz served as the Vice President and Chief Technology Officer at Appitude, Inc. (the original assignee of the patents-in-suit), and he continued as VP and CTO at Hifn, Inc. after Hifn acquired Appitude, Inc. and the patents-in-suit. Among his other positions, Mr. Dietz currently serves as a technology consultant to Packet Intelligence.

### SANDVINE'S TECHNOLOGY AND THE MARKET FOR ITS TECHNOLOGY

32. Sandvine develops and markets Network Policy Control solutions for high-speed, or "broadband" Internet service providers that require management of network performance through deep packet inspection or DPI. Sandvine's solutions help service providers better understand their networks and apply specific network policies that will improve the quality of

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service for their subscribers, support the creation of new revenue-generating services, mitigate malicious traffic, more efficiently manage network traffic and notify subscribers of important information. Sandvine has over 250 Internet service provider customers in over 90 countries who serve hundreds of millions of fixed line and mobile broadband Internet subscribers.

33. In 2013, Infonetics Research estimated that service providers spent \$728 million on DPI solutions. In its October 2014 report, Infonetics Research predicted that Sandvine's market would grow to just under \$2.0 billion annually by 2018, and named Sandvine the market share leader.

34. According to Sandvine's 2014 Annual Report, "Sandvine's network policy control equipment and solutions add intelligence to fixed, mobile and converged communications service provider networks. By providing end-to-end policy control functions, including traffic classification, policy decision and enforcement, the products provide service providers with actionable business insight, the ability to deploy new subscriber services and tools to optimize network traffic."

35. In a 2014 Letter to Shareholders, Sandvine reported "a record \$123.4 million in revenue. . . [r]evenue from the Wireless market grew from 37% of revenue in 2013 to 47% in 2014, while the Cable market was also a key driver for revenue growth for the year and represented 27% of total revenue. Geographically, North America and the Caribbean and Latin America were our highest growth regions."

36. In its 2014 Annual Report, Sandvine described its target market as "broadband Internet service providers worldwide, including those which offer such services through mobile, DSL, cable, fixed wireless, and FTTx Internet access technologies. Within the fixed line component (DSL, cable and FTTx) of the market, Sandvine primarily targets the top 250

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operators around the world, by subscriber count, which represent the vast majority of the global subscriber base. Industry analyst reports estimate that there were approximately 650 million fixed line broadband subscribers globally at the end of 2013. In the wireless market (mobile and fixed wireless), Sandvine primarily targets the top 350 service providers in the world. According to industry analysts there were approximately 2 billion mobile broadband users at the end of 2013. This figure is expected to grow rapidly over the next few years with ongoing adoption of smart devices."

37. The 2014 Annual Report also explains that "Sandvine distributes its products and services through a combination of direct and indirect sales channels in order to obtain global sales coverage and retain direct contact with the customer base . . . With direct sales, the ultimate end customer purchases products directly from [Sandvine]. The direct sales team comprises Sandvine employees and local area representatives . . . The indirect sales channel utilizes reseller partners such as global network equipment vendors, systems integrators and regional value-added resellers to market and sell Sandvine's products. Sales may be initiated by partners or initiated by Sandvine and then fulfilled and serviced through reseller partners. In all cases the partner purchases [Sandvine's] product for the purpose of reselling it to the ultimate end customer."

38. Sandvine's Network Policy Control solutions typically comprise a hardware platform and proprietary software modules that are typically bundled together to provide a system for broadband Internet service providers to identify (e.g., video streams like Netflix, VoIP traffic like Skype, or online gaming), report on and take action on the data traversing their networks.

#### SANDVINE'S INFRINGING PRODUCTS

39. The core of Sandvine's hardware platform is the Policy Traffic Switch ("PTS"), which includes a Policy Engine (PE). Sandvine's PTS product line includes at least three hardware models, referred to as the PTS 22000, PTS 24000, and PTS 32000, and each of these accused models are available in a range of variants with different performance characteristics and includes a PE. Sandvine also offers the PTS Virtual Series, which is a software-only version of the PTS functionality suitable for networks architected for Network Functions Virtualization ("NFV") and Software Defined Networking ("SDN"). NFV is a carrier-led effort to move away from proprietary hardware, motivated by desires to dramatically reduce the cost of deployment by using standard commercial off-the-shelf ("COTS") hardware, for all network functions, in a shared environment. Running all functions on identical, shared hardware promises a much simpler, more efficient network. A related concept, SDN, seeks to establish the linkage/paths between virtualized network functions in software, on-the-fly, via application program interfaces ("APIs"). SDN is a deployment tool that enables a programmable network. The shift to NFVand SDN-enabled network means that the functions running on Sandvine's PTS and PE, other aspects of its hardware platform and existing software offerings will all be offered as softwareonly to run on COTS hardware.

40. Embedded within Sandvine's PTS products is the Sandvine PE, which "can be thought of as a black box into which information about measured conditions and provisioned subscriber entitlement flows, and out of which charging updates, management actions, and business intelligence emerge." (*See* Exhibit 8, Policy Traffic Switch Overview Data Sheet). The PTS "software performs vital functions and provides information for the Policy Engine." (*Id.*)

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One of the functions the PTS software provides is Deep Packet Inspection (DPI) that provides real-time information about the identity and measured characteristics of network traffic. (*Id.*)

41. Sandvine's PTS's are available as both a hardware appliance and as a virtual appliance that is a software application that executes on a standard computer server running the Linux operating system. (*See* Exhibit 9, Policy Traffic Switch Virtual Series Datasheet).

42. The above-identified and described Sandvine PE, and Sandvine PTS hardware appliance products and software, as well as Sandvine's virtual appliance software application products, comprise Sandvine's "**PTS Infringing Products**."

### **OPERATION OF SANDVINE'S PTS INFRINGING PRODUCTS**

43. Both the physical and the virtual versions of the PTS Infringing Products provide the PTS Software functionality as shown in the graphic below. The virtual PTS, running on a Linux OS server in a data center network is connected to a point in the network through the data port(s) of the server. The server's network interface card(s) are packet acquisition device(s) with data throughput speeds from 1 gigabyte per second through 80 gigabytes per second or more dependent upon the type and number of cores of the server's central processor unit. Provided below is a graphic representation of the functions provided by PTS Products. The graphic shows that the functionality of the PTS hardware appliance and the virtual PTS in terms of both the Sandvine Policy Engine and the PTS Software is identical. (*See, e.g.*, Exhibit 8).



44. Sandvine's PTS Infringing Products connect to a computer network via a network port and/or network interface device, such network interface device having buffer memories to facilitate reception and transmission of data to and from the physical network connection point.

45. An image of the backplane of a representative hardware version of the PTS Infringing Products (Model 24000), shows the network ports that are used to connect the PTS to a connection point of a computer network (Exhibit 10, PTS 24000 Datasheet):



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46. A graphic showing how the virtual PTS Infringing Products connect to the network is below. The graphic shows the network interface cards (NICs) of the server connecting to a physical interface on the network (*See* Exhibit 11, Sandvine Implementing Policy Control as a Virtual Network Function Whitepaper).



47. Sandvine periodically issues software updates called the Loadable Traffic Identification Package (LTIP)—*see e.g.*, Exhibit 12, Sandvine LTIPs 13.03.01, No. 05-00070-B41—which updates the parsing/extraction operations memory of the PTS Infringing Products with operations to identify new protocols, changes to existing operations reflecting changes in existing protocols, and deletions of operations for protocols no longer in use. These update documents refer to items such as "fixed pattern signatures" for protocols such as TCP or HTTP and others that are used to recognize the identity of protocols at the application layer.

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48. The operating systems of the PTS Infringing Products use IPTables, Netfilter, and Conntrack modules to create and maintain their networking session (flow) tables. All three use information from network packets referred to as the 5-Tuple to identify packets with existing sessions (flows). The 5-tuple consists of the packet's source IP address, the source port number, the destination IP address, the destination port number, and the layer 4 transport protocol ID. These five items are parsed/extracted from every arriving packet and the parser subsystem then forms a function using the 5 values as the input to the function. The hardware PTS Infringing Products employ a network processing unit (which includes a parser subsystem connected to the pattern/extraction operations memory) that examines packets and determines the flow to which they belong and it uses this information to direct the processing of the packet to a processor core that will then see all traffic in both directions for that "particular flow, session, or subscriber." (*See* Exhibit 13, Sandvine Maximizing Performance With Core and Processor Affinity).

49. The software PTS Infringing Products use a combination of an intelligent load balancer and the Intel DPDK to examine packets and route them to the desired processor and processor core. (*See, e.g.*, Exhibit 11).

50. The PTS Infringing Products using CPU cores coupled to a flow entry database and a state pattern/operations memory perform a state processing and protocol/state identification.

51. The PTS Infringing Products employ "Stateful Awareness," illustrated, for example, by an FTP (File Transfer Protocol), which defines a control channel that mediates the creation of an FTP Data session used to transfer a file. Because the source and destination port numbers to be used are part of the negotiation, the PTS Infringing Products employ a finite state machine to track the exchange of information on the control channel between the server and the

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client. Sandvine calls these statefully aware signatures "trackers." The finite state machines (trackers) are parsing/extraction operations that are stored in a parsing/extractions operations memory and they describe how to determine at least one of the protocols used in a packet (the FTP PORT command for instance) from the information stored in the parsing/extraction operations memory. In addition, the parsing /extraction operations memory contains information describing how to extract the source and destination ports and addresses along with the Layer 4 transport protocol and its associated settings. (*See* Exhibit 14, Sandvine Internet Traffic Classification).

## **INFRINGEMENT OF U.S. PATENT NO. 6,651,099**

52. Packet Intelligence realleges paragraphs 1 through 51 as though fully set forth herein.

53. Sandvine has infringed directly and continues to infringe directly at least claim 1 of the '099 Patent by its manufacture, sale, offer for sale, and use of any one or more of the Sandvine PTS Infringing Products. Sandvine is therefore liable for infringement of the '099 Patent pursuant to 35 U.S.C. § 271.

54. As of the time Sandvine first had notice of the '099 Patent, which is no later than the filing date of this complaint, Sandvine indirectly infringed and continues to indirectly infringe at least claim 1 of the '099 Patent by active inducement under 35 U.S.C. § 271(b). Sandvine has induced, caused, urged, encouraged, aided and abetted its direct and indirect customers to make, use, sell, offer for sale and/or import the PTS Infringing Products, and thus indirectly infringes at least claim 1 of the '099 Patent. Sandvine has done so by acts including but not limited to selling such products including features that—when used or resold—infringe the '099 Patent; and by marketing the infringing capabilities of such products; and by providing

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instructions, technical support, and other support and encouragement for the use of such products. Such conduct by Sandvine was intended to and actually did result in direct infringement by Sandvine's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the PTS Infringing Products in the United States.

55. As of the time Sandvine first had notice of the '099 Patent, which is no later than the filing date of this complaint, Sandvine is a contributory infringer of at least claim 1 of the '099 Patent under 35 U.S.C. § 271(c). Sandvine offers to sell and sells components, materials, or apparatuses with or as part of its PTS Infringing Products that are specially made or adapted to examine packets passing through a connection point on a computer network in the manner claimed in at least claim 1 of the '099 Patent. The components, materials, or apparatuses provided by Sandvine with its PTS Infringing Products constitute a material part of the invention claimed within the '099 Patent, are not staple articles, and have no substantial use that does not infringe the '099 Patent.

56. Sandvine's infringement of the '099 Patent has damaged Packet Intelligence, and Sandvine is liable to Packet Intelligence in an amount to be determined at trial that compensates Packet Intelligence for the infringement, which by law can be no less than a reasonable royalty.

57. As a result of Sandvine's infringement of the '099 Patent, Packet Intelligence has suffered irreparable harm and will continue to suffer loss and injury unless Sandvine is enjoined by this Court.

58. As of the time Sandvine first had notice of the '099 Patent, which is no later than the filing date of this complaint, Sandvine has continued with its infringement despite the objectively high likelihood that its actions constitute infringement and Sandvine's subjective knowledge of this obvious risk. As Sandvine has no good faith belief that it does not infringe the

'099 Patent, Sandvine's infringement of the '099 Patent is willful and deliberate, entitling Packet Intelligence to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

## **INFRINGEMENT OF U.S. PATENT NO. 6,665,725**

59. Packet Intelligence realleges paragraphs 1 through 51 as though fully set forth herein.

60. Sandvine has infringed directly and continues to infringe directly at least claim 17 of the '725 Patent by its manufacture, sale, offer for sale, and use of any one or more of the Sandvine PTS Infringing Products. Sandvine is therefore liable for infringement of the '725 Patent pursuant to 35 U.S.C. § 271.

61. Sandvine first learned of the '725 Patent no later than around July 25, 2005, when the USPTO mailed a Patent Examiner's citation to the '725 Patent during prosecution of Sandvine's U.S. patent application 10/179,168 ("the '168 application"). Packet Intelligence's '725 patent is therefore listed as a prior art reference on the face of Sandvine patent 7,277,963, which issued from the '168 application on October 2, 2007.

62. As of the time Sandvine first had notice of the '725 Patent, Sandvine indirectly infringed and continues to indirectly infringe at least claim 17 of the '725 Patent by active inducement under 35 U.S.C. § 271(b). Sandvine has induced, caused, urged, encouraged, aided and abetted its direct and indirect customers to make, use, sell, offer for sale and/or import the PTS Infringing Products, and thus indirectly infringes at least claim 17 of the '725 Patent. Sandvine has done so by acts including but not limited to selling such products including features that—when used—infringe the '725 Patent; marketing the infringing capabilities of such products; and providing instructions, technical support, and other support and encouragement for

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the use of such products. Such conduct by Sandvine was intended to and actually did result in direct infringement by Sandvine's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of PTS Infringing Products in the United States.

63. As of the time Sandvine first had notice of the '725 Patent, Sandvine was a contributory infringer of at least claim 17 of the '725 Patent under 35 U.S.C. § 271(c). Sandvine offers to sell and sells components, materials, or apparatuses with or as part of its PTS Infringing Products that are specially made or adapted to perform protocol specific operations on a packet passing through a connection point on a computer network in the manner claimed in at least claim 17 of the '725 Patent. The components, materials, or apparatuses provided by Sandvine with its PTS Infringing Products constitute a material part of the invention claimed within the '725 Patent, are not staple articles, and have no substantial use that does not infringe the '725 Patent.

64. Sandvine's infringement of the '725 Patent has damaged Packet Intelligence, and Sandvine is liable to Packet Intelligence in an amount to be determined at trial that compensates Packet Intelligence for the infringement, which by law can be no less than a reasonable royalty.

65. As a result of Sandvine's infringement of the '725 Patent, Packet Intelligence has suffered irreparable harm and will continue to suffer loss and injury unless Sandvine is enjoined by this Court.

66. As of the time Sandvine first had notice of the '725 Patent, Sandvine continued with its infringement despite the objectively high likelihood that its actions constitute infringement and Sandvine's subjective knowledge of this obvious risk. As Sandvine had no good faith belief that it does not infringe the '725 Patent, Sandvine's infringement of the '725 Patent is willful and deliberate, entitling Packet Intelligence to increased damages under 35

U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

## **INFRINGEMENT OF U.S. PATENT NO. 6,771,646**

67. Packet Intelligence realleges paragraphs 1 through 51 as though fully set forth herein.

68. Sandvine has infringed directly and continues to infringe directly at least claim 7 of the '646 Patent by its manufacture, sale, offer for sale, and use of any one or more of the Sandvine PTS Infringing Products. Sandvine is thus liable for infringement of the '646 Patent pursuant to 35 U.S.C. § 271.

69. As of the time Sandvine first had notice of the '646 Patent, which is no later than the filing date of this complaint, Sandvine indirectly infringed and continues to indirectly infringe at least claim 7 of the '646 Patent by active inducement under 35 U.S.C. § 271(b). Sandvine has induced, caused, urged, encouraged, aided and abetted its direct and indirect customers to make, use, sell, offer for sale and/or import the PTS Infringing Products, and thus indirectly infringes at least claim 7 of the '646 Patent. Sandvine has done so by acts including but not limited to selling such products including features that—when used or resold—infringe at least claim 7 of the '646 Patent; marketing the infringing capabilities of such products; and providing instructions, technical support, and other support and encouragement for the use of such products. Such conduct by Sandvine was intended to and actually did result in direct infringement by Sandvine's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of PTS Infringing Products in the United States.

70. When Sandvine first had notice of the '646 Patent, which is no later than the filing date of this complaint, Sandvine was a contributory infringer of at least claim 7 of the '646

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Patent under 35 U.S.C. § 271(c). Sandvine offers to sell and sells components, materials, or apparatuses with or as part of its PTS Infringing Products that are specially made or adapted to examine packets passing through a connection point on a computer network in the manner claimed in at least claim 7 of the '646 Patent. The components, materials, or apparatuses provided by Sandvine with its PTS Infringing Products constitute a material part of the invention claimed within the '646 Patent, are not staple articles, and have no substantial use that does not infringe the '646 Patent.

71. Sandvine's infringement of the '646 Patent has damaged Packet Intelligence, and Sandvine is liable to Packet Intelligence in an amount to be determined at trial that compensates Packet Intelligence for the infringement, which by law can be no less than a reasonable royalty.

72. As a result of Sandvine's infringement of the '646 Patent, Packet Intelligence has suffered irreparable harm and will continue to suffer loss and injury unless Sandvine is enjoined by this Court.

73. As of the time Sandvine first had notice of the '646 Patent, which is no later than the filing date of this complaint, Sandvine has continued with its infringement despite the objectively high likelihood that its actions constitute infringement and Sandvine's subjective knowledge of this obvious risk. As Sandvine has no good faith belief that it does not infringe the '646 Patent, Sandvine's infringement of the '646 Patent is willful and deliberate, entitling Packet Intelligence to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

## **INFRINGEMENT OF U.S. PATENT NO. 6,839,751**

74. Packet Intelligence realleges paragraphs 1 through 51 as though fully set forth herein.

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75. Sandvine has infringed directly and continues to infringe directly at least claim 17 of the '751 Patent by its manufacture, sale, offer for sale, and use of network components that include or use at least any one or more of the PTS Infringing Products. Sandvine is thus liable for infringement of the '751 Patent pursuant to 35 U.S.C. § 271.

76. As of the time Sandvine first had notice of the '751 Patent, which is no later than the filing date of this complaint, Sandvine indirectly infringed and continues to indirectly infringe at least claim 17 of the '751 Patent by active inducement under 35 U.S.C. § 271(b). Sandvine has induced, caused, urged, encouraged, aided and abetted its direct and indirect customers to make, use, sell, offer for sale and/or import the PTS Infringing Products, and thus indirectly infringes at least claim 17 of the '751 patent. Sandvine has done so by acts including but not limited to selling such products including features that—when used or resold—infringe at least claim 17 the '751 Patent; marketing the infringing capabilities of such products; and providing instructions, technical support, and other support and encouragement for the use of such products. Such conduct by Sandvine was intended to and actually did result in direct infringement by Sandvine's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of PTS Infringing Products in the United States.

77. When Sandvine first had notice of the '751 Patent, which is no later than the filing date of this complaint, Sandvine was a contributory infringer of at least claim 17 of the '751 Patent under 35 U.S.C. § 271(c). Sandvine offers to sell and sells components, materials, or apparatuses with or as part of its PTS Infringing Products that are specially made or adapted to examine packets passing through a connection point on a computer network in the manner claimed in at least claim 17 of the '751 Patent. The components, materials, or apparatuses provided by Sandvine with its PTS Infringing Products constitute a material part of the invention

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claimed within the '751 Patent, are not staple articles, and have no substantial use that does not infringe the '751 Patent.

78. Sandvine's infringement of the '751 Patent has damaged Packet Intelligence, and Sandvine is liable to Packet Intelligence in an amount to be determined at trial that compensates Packet Intelligence for the infringement, which by law can be no less than a reasonable royalty.

79. As a result of Sandvine's infringement of the '751 Patent, Packet Intelligence has suffered irreparable harm and will continue to suffer loss and injury unless Sandvine is enjoined by this Court.

80. As of the time Sandvine first had notice of the '751 Patent, which is no later than the filing date of this complaint, Sandvine has continued with its infringement despite the objectively high likelihood that its actions constitute infringement and Sandvine's subjective knowledge of this obvious risk. As Sandvine has no good faith belief that it does not infringe the '751 Patent, Sandvine's infringement of the '751 Patent is willful and deliberate, entitling Packet Intelligence to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

### **INFRINGEMENT OF U.S. PATENT NO. 6,954,789**

81. Packet Intelligence realleges paragraphs 1 through 51 as though fully set forth herein.

82. Sandvine has infringed directly and continues to infringe directly at least claim 19 of the '789 Patent by its manufacture, sale, offer for sale, and use of network components that include or use at least any one or more of the PTS Infringing Products. Sandvine is thus liable for infringement of the '789 Patent pursuant to 35 U.S.C. § 271.

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83. As of the time Sandvine first had notice of the '789 Patent, which is no later than the filing date of this Complaint, Sandvine indirectly infringed and continues to indirectly infringe at least claim 19 of the '789 Patent by active inducement under 35 U.S.C. § 271(b). Sandvine has induced, caused, urged, encouraged, aided and abetted its direct and indirect customers to make, use, sell, offer for sale and/or import the PTS Infringing Products. Sandvine has done so by acts including but not limited to selling such products including features that when used or resold—infringe at least claim 19 of the '789 Patent; marketing the infringing capabilities of such products; and providing instructions, technical support, and other support and encouragement for the use of such products. Such conduct by Sandvine was intended to and actually did result in direct infringement by Sandvine's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of PTS Infringing Products in the United States.

84. As of the time Sandvine first had notice of the '789 Patent, which is no later than the filing date of this complaint, Sandvine was a contributory infringer of at least claim 19 of the '789 Patent under 35 U.S.C. § 271(c). Sandvine offers to sell and sells components, materials, or apparatuses with or as part of its PTS Infringing Products that are specially made or adapted to examine packets passing through a connection point on a computer network in the manner claimed in at least claim 19 of the '789 Patent. The components, materials, or apparatuses provided by Sandvine with its PTS Infringing Products constitute a material part of the invention claimed within the '789 Patent, are not staple articles, and have no substantial use that does not infringe the '789 Patent.

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85. Sandvine's infringement of the '789 Patent has damaged Packet Intelligence, and Sandvine is liable to Packet Intelligence in an amount to be determined at trial that compensates Packet Intelligence for the infringement, which by law can be no less than a reasonable royalty.

86. As a result of Sandvine's infringement of the '789 Patent, Packet Intelligence has suffered irreparable harm and will continue to suffer loss and injury unless Sandvine is enjoined by this Court.

87. As of the time Sandvine first had notice of the '789 Patent, which is no later than the filing date of this complaint, Sandvine has continued with its infringement despite the objectively high likelihood that its actions constitute infringement and Sandvine's subjective knowledge of this obvious risk. As Sandvine has no good faith belief that it does not infringe the '789 Patent, Sandvine's infringement of the '789 Patent is willful and deliberate, entitling Packet Intelligence to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

## DEMAND FOR JURY TRIAL

88. Plaintiff Packet Intelligence demands a trial by jury on all issues so triable, pursuant to Rule 38 of the Federal Rules of Civil Procedure.

# PRAYER FOR RELIEF

WHEREFORE, Plaintiff Packet Intelligence prays for the following relief:

A. A judgment in favor of Packet Intelligence that the Sandvine Defendants have infringed and are infringing the '099, '725, '646, '751, and '789 Patents;

B. An Order permanently enjoining the Sandvine Defendants, their respective officers, agents, employees, and those acting in privity with it, from further direct and/or indirect infringement of the '099, '725, '646, '751, and '789 Patents;

C. An award of damages to Packet Intelligence arising out of Sandvine's infringement of the '099, '725, '646, '751, and '789 Patents, including enhanced damages pursuant to 35 U.S.C. § 284, together with prejudgment and post-judgment interest, in an amount to be determined at trial;

D. An award of an ongoing royalty for Sandvine's post-judgment infringement in an amount to be determined at trial;

E. A judgment declaring this case exceptional under 35 U.S.C. § 285 and awarding Packet Intelligence its attorneys' fees with prejudgment and post-judgment interest; and

F. Granting Packet Intelligence its costs and any further relief as the Court may deem just and proper.

Date: February 17, 2016

Respectfully submitted:

/s/ Paul J. Skiermont Paul J. Skiermont Texas SB # 24033073 Sarah E. Spires Texas SB # 24083860 Steven W. Hartsell Texas SB # 24040199 Steve Udick Texas SB # 24079884 SKIERMONT DERBY LLP 2200 Ross Avenue, Suite 4800W Dallas, Texas 75201 (214) 978-6600 (telephone) (214) 978-6601 (facsimile) pskiermont@skiermontderby.com sspires@skiermontderby.com shartsell@skiermontderby.com sudick@skiermontderby.com

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