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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

SOLARFLARE COMMUNICATIONS, INC., Plaintiff, v. EXABLAZE PTY LTD., Defendant.	Civil Action No. 16-1891 (JLL) (JAD)

FIRST AMENDED COMPLAINT AND JURY DEMAND

Plaintiff Solarflare Communications, Inc ("Solarflare") hereby bring this Complaint for patent infringement ("Complaint") against Defendant Exablaze Pty, Ltd. ("Exablaze" or "Defendant") for infringement of U.S. Patents Nos. 8,116,312 ("the'312 patent"), 8,645,558 ("the'558 patent"), 8,817,784 ("the'784 patent"), 9,258,390 ("the'390 patent"), 9,003,053 ("the '053 patent"), and 8,612,536 ("the

'536 patent") (collectively "the Asserted Solarflare Patents"). Plaintiff, on personal knowledge, and on information and belief based on investigation, avers as follows:

THE PARTIES

1. Plaintiff Solarflare is a Delaware Corporation with its principal place of business located at 7505 Irvine Center Drive, Suite 100, Irvine, California 92618.

2. Upon information and belief, Defendant Exablaze is an Australian proprietary limited company with corporate headquarters at Level 5, 443 Little Collins Street, Melbourne, VIC 3000, Australia.

SUMMARY OF THE ACTION

3. Plaintiff Solarflare is the leading provider of application-intelligent networking input/output ("I/O") software and hardware. Solarflare's customers use Solarflare's innovative hardware and software products to accelerate, monitor, and secure data in the most demanding commercial applications.

4. Among its innovative product offerings, Solarflare offers network interface cards ("NICs") and associated software that allow their customers to minimize latency, achieving accelerated network I/O.

5. As a result of Solarflare's commitment to innovation and extensive investment in research and development, the United States Patent and Trademark Office has granted Solarflare numerous patents covering a wide range of

networking inventions. Among these patents are the Asserted Solarflare Patents (the '312 patent, the '558 patent, the '784 patent, the '390 patent, the '053 patent, and the '536 patent), which cover technology and inventions directed to minimizing latency in network I/O.

6. Defendant Exablaze makes, sells, offers to sell, and imports NICs and associated software designed to minimize latency in network I/O.

7. The design and intended use of Exablaze's NICs and associated software incorporates Solarflare's proprietary technology in an attempt to minimize latency in network I/O, and thus Exablaze infringes the Asserted Solarflare Patents.

8. Solarflare comes to this Court seeking judgment of patent infringement against Exablaze.

JURISDICTION AND VENUE

9. This action arises under the Patent Act, 35 U.S.C. § 100, *et seq*. This Court has subject matter jurisdiction over the action pursuant to 28 U.S.C. §§ 1331, and 1338(a).

10. Venue is proper in the District of New Jersey pursuant to 28 U.S.C. §§ 1391(b) and (c), and 1400(b).

11. Exablaze is subject to this Court's personal jurisdiction because it has purposefully availed itself of the rights and benefits of the laws of New Jersey, and its New Jersey activities give rise to Solarflare's claims. This Court has personal

jurisdiction over Exablaze because Exablaze has participated in the commission of acts giving rise to this action within this judicial district and has established minimum contacts within New Jersey such that the exercise of jurisdiction over Exablaze does not offend traditional notions of fair play and substantial justice. Exablaze has sold and distributed its infringing products in this judicial district. Exablaze has also placed its infringing products into the stream of commerce with the reasonable expectation and knowledge that actual or potential ultimate purchasers and users of such products are located within this judicial district. Alternatively, Exablaze is subject to this Court's personal jurisdiction under Fed. R. Civ. P. 4(k)(2).

BACKGROUND

Exablaze's Infringing Products

12. Exablaze produces at least three different NICs, the ExaNIC X2, the ExaNIC X4, and the ExaNIC X10 (the "Exablaze Products").

13. Exablaze has a support webpage located at: http://exablaze.com/support (the "Exablaze Support Webpage").

14. When a customer in the United States purchases an Exablaze Product, they are given access to Exablaze's Support Webpage.

15. Exablaze's Support Webpage provides drivers, software, and firmware updates ("Exablaze Software") for the Exablaze Products.

16. Exablaze's Support Webpage provides source code and documentation ("Exablaze Documentation") for the Exablaze Products.

17. The documentation on Exablaze's Support Webpage instructs customers how to use the Exablaze Products.

18. Each Exablaze Product is a network interface apparatus or device.

19. Each Exablaze Product is made for use with a network.

20. Each Exablaze Product has an ethernet port to interface with a network.

21. Each Exablaze Product is for use with a host subsystem in communication with the network interface apparatus via an internal communications bus of the host subsystem.

22. Each Exablaze Product has a PCIe x8 host interface.

23. Each Exablaze Product is for use in a host subsystem being capable of running an operating system having a network protocol stack and at least one user level process collectively having a plurality of user level endpoints for receipt of data packets incoming from the Exablaze Product.

24. Each Exablaze Product can be run with any distribution of Linux.

25. Linux has a network protocol stack.

26. Linux supports execution on a host subsystem of one, two, or more applications. These applications may each have one or more user-level endpoints

for receipt of data packets. Collectively, these applications would have a plurality of user level endpoints for receipt of data packets.

27. Each Exablaze Product can use hardware based flow steering to deliver packets to the right application's receive buffer.

28. Each Exablaze Product has a filter for filtering incoming data packets received from the network.

29. On information and belief, each Exablaze Product has a table that identifies at least two user level endpoints for receipt of incoming data packets matching a single set of group filter criteria.

30. Exablaze Software assists a user of a host subsystem with an installed Exablaze Product to configure the Exablaze Product filters to steer incoming frames to one or more buffers in memory.

31. Exablaze Software enables multiple applications access to the same one of these buffers.

32. Each Exablaze Product makes decisions about where to transfer each incoming frame from a network based on rules that can be user-defined.

33. Each Exablaze Product can multicast UDP traffic to a specific multicast address, but with any source address.

34. On information and belief, each Exablaze Product has a table that stores user defined rules.

35. Each Exablaze Product is for use in a host subsystem that has an operating system having a network protocol stack.

36. On information and belief each Exablaze Product has a filter for filtering incoming data packets received from the network, the filter comprising a filter table.

37. On information and belief, each Exablaze Product is configured to, in response to receipt from the network of an incoming data packet of a first multicast group, to deliver the data packet via a communications bus to each of a plurality of user level processes each identified in the filter table, bypassing the operating system on the host subsystem.

38. Each Exablaze Product can use kernel bypass for delivery of packets to user level processes.

39. On information and belief, each Exablaze Product is configured to determine if the following conditions are fulfilled: the incoming data packet is not malformed, the incoming data packet uses a protocol that is supported in the filter table, and at least one correspondence is found between the incoming data packet and at least one user level endpoint. If all of the conditions are fulfilled, each Exablaze Product will deliver the incoming data packet to each of the plurality of user level processes, and otherwise, each Exablaze Product will deliver the incoming data packet to the operating system.

40. If the ExaNIC x4 product, and on information and belief each Exablaze Product, receives a packet that has header parameters matching filter criteria but has a malformed header, the received packet will be sent to the operating system on the host subsystem rather than through kernel bypass to a user level process.

41. Parameters in each Exablaze Product filter table may include endpoint-identifying information.

42. One of the parameters in each Exablaze Product filter table can be a protocol.

43. One of the parameters in each Exablaze Product filter table can be a source or destination address.

44. One of the parameters in each Exablaze Product filter table can be source or destination port.

45. Examples of protocols supported by each Exablaze Product's filter table are UDP or TCP.

46. The Exablaze Software contains ExaNIC Sockets (the "Exasock Library").

47. The Exasock Library is an acceleration library.

48. The Exasock Library is a kernel bypass sockets library.

49. The Exasock Library allows standard Linux sockets applications to transparently bypass the kernel.

50. The Exasock Library runs in user space on a host.

51. The Exasock Library is also known as exasock.

52. When installed in a host with the Exasock Library, each Exablaze Product forms a data processing system for receiving data from a network, and processing that data in accordance with a network protocol to extract traffic data therefrom.

53. The Exasock Library enables extraction of payloads from TCP and UDP network protocols.

54. When installed in a host with the Exasock Library, each Exablaze Product forms a data processing system having a memory.

55. When installed in a host with the Exasock Library, each Exablaze Product forms a data processing system having a network interface for receiving the data from the network and storing the data in memory.

56. Each Exablaze Product has direct access to user space buffers in memory.

57. When installed in a host with the Exasock Library, each Exablaze Product forms a data processing system having an operating system for supporting one or more applications.

58. When installed in a host with the Exasock Library, each Exablaze Product forms a data processing system having an application supported by the operating system.

59. Linux supports execution in a host of one, two, or more applications, and such applications have threads.

60. The Exasock Library is a protocol processing entity providing an application programming interface (API) configured to process received data in accordance with a network protocol to extract traffic data therefrom.

61. When a send(), select(), recv(), or epoll() call is made by an application executing on the host, it can be redirected to the Exasock Library.

62. This redirection is sometimes called "hooking."

63. When the Exasock Library is called with a select(), recv(), or epoll() call, it calls subroutines internal to the Exasock Library that process received data in accordance with TCP or UDP to extract a payload from the received data.

64. The Exasock Library is arranged to perform protocol processing of received data in the memory in response to signaling from a thread of the application to request whether data is available for one or more endpoints of the data processing system.

65. The calls select(), recv(), and epoll() of the Exasock Library include a file descriptor as an argument.

66. Each Exablaze Product has a field-programmable gate array ("FPGA"). A FPGA is an integrated circuit designed to be configured by a customer.

67. Exablaze produces a software product called the ExaNIC FPGA Development Kit (the "Exablaze FPGA Dev Kit").

68. When an Exablaze Product is installed in a host with the Exasock Library, the resulting combination can perform a method of transmitting data for use at a data processing system and network interface device, the data processing system being coupled to a network by the network interface device.

69. When an Exablaze Product is installed in a host with the Exasock Library, the resulting combination can form a message in accordance with a predetermined set of network protocols, the message including at least in part one or more protocol headers comprising header data.

70. The Exablaze Software includes an ExaNIC driver that allows a host to communicate with the Exablaze Products.

71. The Exasock Library and ExaNIC driver allows applications to obtain the next set of TCP headers for a particular socket.

72. The Exasock Library provides a TCP acceleration feature that allows an application to construct partial or complete TCP packets ahead of time.

73. When an Exablaze Product is installed in a host with the Exasock Library, the resulting combination can develop an application layer message in one or more parts subsequent to formation of a message including one or more protocol headers comprising header data.

74. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit, instruct users how to

develop an application layer message after formation of a TCP header that will be transmitted with all or part of the application layer message.

75. When an Exablaze Product is installed in a host with the Exasock Library, the resulting combination can update a formed message with the parts of an application layer message subsequent to formation of a message including one or more protocol headers comprising header data.

76. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit, instruct users how to update a formed message with parts of the application layer message subsequent to formation of the formed message, where the formed message includes a TCP header that will be transmitted with all or part of the application layer message.

77. When an Exablaze Product is installed in a host with the Exasock Library, the resulting combination can process a formed message in accordance with a predetermined set of network protocols to complete a protocol headers subsequent to formation of a message including one or more protocol headers comprising header data.

78. Logic within each Exablaze Product automatically calculates, appends and transmits a cyclic redundancy check (CRC) subsequent to formation of a message including one or more protocol headers comprising header data.

79. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit, enables pre-loading an Exablaze Product with a pattern, mask and reply frame.

80. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit show that IP ethertype, UDP protocol or destination port can be set up as a pattern trigger for an FPGA application.

81. Each Exablaze Product will transmit a completed message over the network in response to a trigger or instruction.

82. When an Exablaze Product is installed on a host with the Exasock Library, the resulting combination is a data processing system.

83. The Exasock Library implements a network protocol stack.

84. The Exasock Library implements a network protocol stack operable to support one or more transport streams by performing transport stream protocol processing of data packets received over the streams.

85. When an Exablaze Product is installed on a host with the Exasock Library, the resulting combination has a network protocol stack operable to support one or more transport streams by performing transport stream protocol processing of data packets received over the streams.

86. When installed in a host with the Exasock Library, each Exablaze Product is arranged to couple the host computing device to a network and is operable to transmit data packets over a transport stream supported by a network protocol stack.

87. When an Exablaze Product is installed on a host, its FPGA can be configured to act as a message engine configured to perform upper layer protocol processing.

88. When an Exablaze Product is installed on a host, its FPGA can be configured with a user application to perform upper layer protocol processing.

89. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit, instruct users how to configure an Exablaze Product's FPGA with a user application to perform upper layer protocol processing.

90. When an Exablaze Product is installed on a host with the Exasock Library, the resulting combination has a network protocol stack that can be configured, on upper layer data being for transmission over one of a predetermined set of transport streams, to form transport stream information sufficient for the message engine to form a data packet without performing transport stream protocol processing and cause the message engine to process the upper layer data in accordance with the upper layer protocol so as to form one or more upper layer messages.

91. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit, instruct users how to configure a network protocol stack, on upper layer data being for transmission over one of a predetermined set of transport streams, to form transport stream information sufficient for the message engine to process the upper layer data in accordance with the upper layer protocol so as to form one or more upper layer messages.

92. When an Exablaze Product is installed on a host with the Exasock Library, the resulting combination has a message engine that can be configured to, in dependence on the transport stream information, encapsulate the one or more upper layer messages in one or more data packets and cause the network interface device to transmit the data packet over the transport stream.

93. Exablaze Documentation and Exablaze Software, and in particular source code examples for the ExaNIC FPGA Development Kit, instruct users how to configure a message engine to, in dependence on the transport stream information, encapsulate the one or more upper layer messages in one or more data packets and cause the network interface device to transmit the data packet over the transport stream.

94. An application running on the host with an Exablaze Product installed can form data to be transmitted.

95. When the Exasock Library is called with a send() call, it calls subroutines internal to the Exasock Library that cause data to be written to a data buffer and send the data to be transmitted over the network.

96. The Exasock Library contains code that is "Kernel support for the ExaSock library" (the "Kernel Support Module").

97. When configured, the Kernel Support Module will form part of the operating system.

98. The Kernel Support Module provides retransmit functionality that is triggered by expiration of timers.

99. The Kernel Support Module's retransmit functionality can access a TCP state and retransmit data buffer and retransmit data contained in the buffer.

100. When the Exasock Library and Exablaze Product is configured as instructed by Exablaze, an operating system executing on the processor subsystem is configured to, in response to an application being determined to be unresponsive, access the data buffer and its corresponding connection state and continue the transmission operation by means of the Exablaze Product.

Exablaze's Infringing Activities

101. Exablaze purposefully—and on information and belief, regularly—sends the Exablaze Products into the United States for resale through distribution channels.

102. Exablaze sells the Exablaze Products directly to customers in the United States, including, on information and belief, customers in New Jersey.

103. Exablaze offers for sale Exablaze Products directly to customers in the United States, on information and belief, including to customers in New Jersey.

104. Exablaze imports the Exablaze Products into the United States, including, on information and belief, into New Jersey.

105. When a customer purchases an Exablaze Product, Exablaze provides the customer with access to the Exasock Library.

106. Exablaze sells the Exasock Library.

107. Exablaze offers for sale the Exasock Library.

108. Exablaze imports the Exasock Library.

109. The Exasock Library does not function without an Exablaze Product.

110. The Exasock Library and the select(), recv(), and epoll() calls do not have any substantial non-infringing uses with respect to at least claim 1 of the '558 patent.

111. The Exasock Library, the send() calls, and the Kernel Support Module do not have any substantial non-infringing uses with respect to at least claim 1 of the '536 patent.

112. Exablaze has a website at www.exablaze.com.

113. Exablaze's website includes a map of its "global resellers" at www.exablaze.com/resellers.

114. Exablaze sells the Exablaze Products to each of its global resellers, including resellers located in New Jersey.

115. Exablaze offers for sale the Exablaze Products to each of its global resellers, including resellers located in New Jersey.

116. Exablaze purposefully—and on information and belief, regularly—sends the Exablaze Products to its resellers located in the United States, including in New Jersey.

117. Exablaze's website lists Info X as a New Jersey reseller.

118. Info X is a distributor of storage networking solutions located in Randolph, New Jersey.

119. Info X has a website at http://www.info-x.com.

120. Info X's website lists at least two of the Exablaze Products, ExaNIC X2 and ExaNIC X4, for sale.

121. Exablaze purposefully—and on information and belief, regularly—sends the Exablaze Products into New Jersey for distribution by Info X.

122. Info X resells and distributes the Exablaze Products to customers and other resellers in the United States, including, upon information and belief, in New Jersey.

123. Exablaze's website lists tecnologika USA as a New Jersey reseller.

124. Through its reseller relationship with Info X and/or tecnologika USA, Exablaze knows that the Exablaze Products are being marketed and sold in New Jersey, and intends to benefit from sales of the Exablaze Products in New Jersey.

125. Exablaze's website lists CDW Corporation as a reseller.

126. CDW Corporation is a provider of integrated information technology solutions, with multiple facilities located in New Jersey.

127. CDW Corporation has a website at https://www.cdw.com.

128. CDW Corporation's website lists at least two of the Exablaze Products, ExaNIC X4 and ExaNIC X10, for sale.

129. Exablaze purposefully—and on information and belief, regularly—ships the Exablaze Products into the United States for resale and distribution by CDW Corporation.

130. CDW Corporation distributes and resells the Exablaze Products to customers throughout the United States, including, on information and belief, in New Jersey.

131. Exablaze's website lists SYNNEX Corporation as a reseller.

132. SYNNEX Corporation is a business process services company with facilities located in New Jersey.

133. SYNNEX Corporation has a website at http://www.synnex.com.

134. SYNNEX Corporation's website lists at least two of the Exablaze Products, ExaNIC X4 and ExaNIC X10, for sale.

135. Exablaze purposefully—and on information and belief, regularly—ships the Exablaze Products into the United States for resale by SYNNEX Corporation.

136. SYNNEX Corporation resells the Exablaze Products to customers throughout the United States, including, on information and belief, customers in New Jersey.

137. Through its distributer and reseller relationships, Exablaze knows that the Exablaze Products are being imported, marketed, offered for sale, and/or sold in the United States, and intends to benefit from sales of the Exablaze Products in the United States.

138. Exablaze currently employs a consulting engineer in the United States. On information and belief, the employee is involved with the sales and marketing of the Exablaze Products in the United States.

139. Exablaze and Solarflare are direct competitors.

140. Exablaze and/or its parent company own patents or patent applications. On information and belief, in connection with these applications Exablaze monitors patent literature related to its NIC business.

141. On information and belief, because of the direct competition between Exablaze and Solarflare and Exablaze's monitoring of patent literature, Exablaze has had knowledge of the Asserted Solarflare Patents since issue.

142. Exablaze has had knowledge of the the'312 patent, the'558 patent, the'784 patent, and the'390 patent, at least since April 5, 2016, the date this action was filed.

143. On information and belief, Exablaze examined Solarflare's patent portfolio on or about April 5, 2016 and had knowledge of the '053 patent and the '536 patent at that time.

144. Exablaze has had knowledge of the '053 patent and the '536 patent since the filing of this First Amended Complaint.

145. The Exablaze Documentation, including the libexanic API Guide, instructs Exablaze customers how to configure the Exablaze Products installed on a host to perform flow steering.

146. The Exablaze Documentation, including the libexanic API Guide, instructs Exablaze customers how to configure the Exablaze Products installed on a host to

determine if an incoming data packet uses a protocol that is supported in a filter table.

147. The Exablaze Documentation, including the libexanic API Guide, instructs Exablaze customers how to configure the Exablaze Products installed on a host to find if there is at least one correspondence between an incoming data packet and at least one user level endpoint.

148. The Exablaze Software contains example code (the "Exablaze Example Code").

149. The Exablaze Example Code teaches and instructs Exablaze customers how to configure the Exablaze Products installed on a host to perform flow steering.

150. The Exablaze Example Code instructs and enables Exablaze customers to configure the Exablaze Products installed on a host to determine if an incoming data packet uses a protocol that is supported in a filter table.

151. The Exablaze Example Code instructs and enables Exablaze customers how to configure the Exablaze Products installed on a host to find if there is at least one correspondence between an incoming data packet and at least one user level endpoint.

152. Exablaze has a blog at https://exablaze.com/media/.

153. In a blog post on the Exablaze blog dated July 25, 2014 and titled "ExaNIC flow steering and load balancing," Exablaze encourages users to use the Exablaze

Products to perform flow steering and teaches that a flow steering rule can be for use with multicast UDP traffic having a specific multicast address, but with any source address.

154. The Exablaze Documentation, including the libexanic API Guide, instructs Exablaze customers how to configure the Exablaze Products and Exasock Library installed on a host to bypass the kernel on the host. When users configure the system in this way—as instructed by Exablaze—they "hook" the send(), select(), recv(), or epoll() calls, and configure the Kernel Support Module.

155. The Exablaze Documentation, including the ExaNIC Sockets Usage Guide, encourage Exablaze customers how to configure the Exablaze Products and Exasock Library installed on a host to bypass the kernel on the host "to benefit from the low latency of direct access to the ExaNIC without requiring modifications to the application."

156. In a blog post on the Exablaze blog dated July 14, 2014 and titled "Reducing latency with Exasock," Exablaze teaches, instructs, and encourages users to use the Exablaze Products and Exasock Library installed on a host to bypass the kernel on the host "to transparently improve the latency of your existing applications without requiring a rebuild."

157. The Exablaze Documentation and Software provides customers with a trigger example (the "Exablaze Trigger Example").

158. Exablaze intends its customers to use the ExaNIC FPGA Development Kit to configure the ExaNIC FPGA with special programming.

159. Exablaze intends that Exablaze customers will use the Exablaze Trigger Example "as a starting point for more advanced custom logic."

160. The Exablaze Trigger Example shows, instructs, and encourages users how to use a low level API to preload the Exablaze Products with an Etherenet frame.

161. The Exablaze Trigger Example shows, instructs and encourages users how to use the Exasock Library to integrate the host TCP state with the FPGA application.

162. In a blog post on the Exablaze blog dated August 28, 2014 and titled "Trading on an FPGA" Exablaze explains the benefits of FPGA offload, and encourages users to use FPGA offload.

COUNT I

(Infringement of the ’312 Patent)

163. Solarflare restates the averments of the preceding paragraphs.

164. Solarflare is the owner of all rights, title, and interest in the ’312 patent, entitled “METHOD AND APPARATUS FOR MUTICAST PACKET RECEPTION,” which was duly and legally issued by the United States Patent and Trademark Office on February 14, 2012. Solarflare has the right to sue and collect damages for infringement of the ’312 patent. A copy of the ’312 patent is attached as Exhibit A.

165. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 21 of the ’312 patent by making, using, importing, offering to sell, and/or selling the Exablaze Products, as well as by actively and intentionally inducing others, including but not limited to customers and end-users, to use the Exablaze Products in a manner that infringes the ’312 patent, including at least claim 21 of the’312 patent.

166. At least since April 5, 2016, the date this action was filed, Exablaze has engaged in such inducement with knowledge of the ’312 patent; with knowledge that others, including but not limited to customers, directly infringe at least claim 21 of the ’312; with knowledge of how Exablaze’s own conduct actively induces others, including but not limited to customers, to infringe claim 21 of the ’312

patent; and with the specific intent to cause such infringement, knowing that the others' conduct constitutes direct infringement of at least claim 21 of the '312 patent.

167. Exablaze's infringement of the '312 patent has caused and continues to cause Solarflare irreparable harm for which there is no adequate remedy at law. The irreparable harm to Solarflare caused by Exablaze will continue unless the Court enjoins Exablaze from continuing its infringing activities.

168. At least since April 5, 2016, the date this action was filed, Exablaze's infringement of the '312 patent is and remains willful and deliberate.

COUNT II

(Infringement of the '784 Patent)

169. Solarflare restates the averments of the preceding paragraphs.

170. Solarflare is the owner of all rights, title, and interest in the '784 patent, entitled "METHOD AND APPARATUS FOR MUTICAST PACKET RECEPTION," which was duly and legally issued by the United States Patent and Trademark Office on August 26, 2014. Solarflare has the right to sue and collect damages for infringement of the '784 patent. A copy of the '784 patent is attached as Exhibit B.

171. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 28 of the '784 patent by making, using, importing, offering to sell, and/or selling the Exablaze Products, as well as by actively and intentionally inducing others, including but not limited to customers and end-users, to use the Exablaze Products in a manner that infringes the '784 patent, including at least claim 28 of the'784 patent.

172. At least since April 5, 2016, the date this action was filed, Exablaze has engaged in such inducement with knowledge of the '784 patent; with knowledge that others, including but not limited to customers and end-users, directly infringe at least claim 28 of the '784; with knowledge of how Exablaze's own conduct actively induces others, including but not limited to customers, to infringe claim 28

of the ’784 patent; and with the specific intent to cause such infringement, knowing that the others’ conduct constitutes direct infringement of at least claim 28 of the ’784 patent.

173. Exablaze’s infringement of the ’784 patent has caused and continues to cause Solarflare irreparable harm for which there is no adequate remedy at law. The irreparable harm to Solarflare caused by Exablaze will continue, unless the Court enjoins Exablaze from continuing its infringing activities.

174. At least since April 5, 2016, the date this action was filed, Exablaze’s infringement of the ’784 patent is and remains willful and deliberate.

COUNT III

(Infringement of the ’558 Patent)

175. Solarflare restates the averments of the preceding paragraphs.

176. Solarflare is the owner of all rights, title, and interest in the ’558 patent, entitled “RECEPTION ACCORDING TO A DATA TRANSFER PROTOCOL OF DATA DIRECTED TO ANY OF A PLURALITY OF DESTINATION ENTITIES FOR DATA EXTRACTION,” which was duly and legally issued by the United States Patent and Trademark Office on February 4, 2014. Solarflare has the right to sue and collect damages for infringement of the ’558 patent. A copy of the ’558 patent is attached as Exhibit C.

177. When others, including but not limited to customers and end-users, install an Exablaze Product and the Exasock Library on a host computer configured as instructed by Exablaze, they infringe literally or under the doctrine of equivalents, at least claim 1 of the ’558 patent.

178. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 1 of the ’558 patent by actively and intentionally inducing others, including but not limited to customers and end-users, to use the Exablaze Products in a manner that infringes the ’558 patent, including at least claim 1 of the’558 patent.

179. At least since April 5, 2016, the date this action was filed, Exablaze has engaged in such inducement with knowledge of the ’558 patent; with knowledge that others, including but not limited to customers and end-users, directly infringe at least claim 1 of the ’558 patent; with knowledge of how Exablaze’s own conduct actively induces others, including but not limited to customers and end-users, to infringe claim 1 of the ’558 patent; and with the specific intent to cause such infringement, knowing that the others’ conduct constitutes direct infringement of at least claim 1 of the ’558 patent.

180. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 1 of the ’558 patent by offering to sell, selling, and importing the Exasock Library (and the select(), recv(), or epoll() calls). At least since April 5, 2016, the date this action was filed, Exablaze knows that the Exasock Library (and the select(), recv(), or epoll() calls) are not staple articles or commodities of commerce capable of substantial non-infringing use; that the Exasock Library (and the select(), recv(), or epoll() calls) constitute a material part of the invention claimed by at least claim 1 of the ’558 patent; and that the Exasock Library (and the select(), recv(), or epoll() calls) are especially made or adapted to infringe at least claim 1 of the ’558 patent.

181. Exablaze’s infringement of the ’558 patent has caused and continues to cause Solarflare irreparable harm for which there is no adequate remedy at law.

The irreparable harm to Solarflare caused by Exablaze will continue, unless the Court enjoins Exablaze from continuing its infringing activities.

182. At least since April 5, 2016, the date this action was filed, Exablaze's infringement of the '558 patent is and remains willful and deliberate.

COUNT IV

(Infringement of the ’390 Patent)

183. Solarflare restates the averments of the preceding paragraphs.

184. Solarflare is the owner of all rights, title, and interest in the ’390 patent, entitled “REDUCING NETWORK LATENCY,” which was duly and legally issued by the United States Patent and Trademark Office on February 9, 2016. Solarflare has the right to sue and collect damages for infringement of the ’390 patent. A copy of the ’390 patent is attached as Exhibit D.

185. When others, including but not limited to customers and end-users, use an Exablaze Product as taught by Exablaze, they infringe literally or under the doctrine of equivalents, at least claim 30 of the ’390 patent.

186. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 30 of the ’390 patent by actively and intentionally inducing others, including but not limited to customers and end-users, to use the Exablaze Products in a manner that infringes the ‘390 patent, including at least claim 30 of the’390 patent.

187. At least since April 5, 2016, the date this action was filed, Exablaze has engaged in such inducement with knowledge of the ’390 patent; with knowledge that others, including but not limited to customers and end-users, directly infringe at least claim 30 of the ’390 patent; with knowledge of how Exablaze’s own

conduct actively induces others, including but not limited to customers and end-users, to infringe claim 30 of the ’390 patent; and with the specific intent to cause such infringement, knowing that the others’ conduct constitutes direct infringement of at least claim 30 of the ’390 patent.

188. Exablaze’s infringement of the ’390 patent has caused and continues to cause Solarflare irreparable harm for which there is no adequate remedy at law. The irreparable harm to Solarflare caused by Exablaze will continue, unless the Court enjoins Exablaze from continuing its infringing activities.

189. At least since April 5, 2016, the date this action was filed, Exablaze’s infringement of the ’390 patent is and remains willful and deliberate.

COUNT V

(Infringement of the ’053 Patent)

190. Solarflare restates the averments of the preceding paragraphs.

191. Solarflare is the owner of all rights, title, and interest in the ’053 patent, entitled “MESSAGE ACCELERATION,” which was duly and legally issued by the United States Patent and Trademark Office on April 7, 2015. Solarflare has the right to sue and collect damages for infringement of the ’053 patent. A copy of the ’053 patent is attached as Exhibit E.

192. When others, including but not limited to customers and end-users, use an Exablaze Product as taught by Exablaze, they infringe literally or under the doctrine of equivalents, at least claim 22 of the ’053 patent.

193. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 22 of the ’053 patent by actively and intentionally inducing others, including but not limited to customers and end-users, to use the Exablaze Products in a manner that infringes the ‘053 patent, including at least claim 22 of the’053 patent.

194. At least since the date this First Amended Complaint was filed, Exablaze has engaged in such inducement with knowledge of the ’053 patent; with knowledge that others, including but not limited to customers and end-users, directly infringe at least claim 22 of the ’053 patent; with knowledge of how Exablaze’s own

conduct actively induces others, including but not limited to customers and end-users, to infringe claim 22 of the ’053 patent; and with the specific intent to cause such infringement, knowing that the others’ conduct constitutes direct infringement of at least claim 22 of the ’053 patent.

195. Exablaze’s infringement of the ’053 patent has caused and continues to cause Solarflare irreparable harm for which there is no adequate remedy at law. The irreparable harm to Solarflare caused by Exablaze will continue, unless the Court enjoins Exablaze from continuing its infringing activities.

196. At least since the date this First Amended Complaint was filed, Exablaze’s infringement of the ’053 patent is and remains willful and deliberate.

COUNT VI

(Infringement of the ’536 Patent)

197. Solarflare restates the averments of the preceding paragraphs.

198. Solarflare is the owner of all rights, title, and interest in the ’536 patent, entitled “USER-LEVEL STACK,” which was duly and legally issued by the United States Patent and Trademark Office on December 17, 2013. Solarflare has the right to sue and collect damages for infringement of the ’536 patent. A copy of the ’536 patent is attached as Exhibit F.

199. When others, including but not limited to customers and end-users, install an Exablaze Product and the Exasock Library on a host computer configured as instructed by Exablaze, they infringe literally or under the doctrine of equivalents, at least claim 1 of the ’536 patent.

200. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 1 of the ’536 patent by actively and intentionally inducing others, including but not limited to customers and end-users, to use the Exablaze Products in a manner that infringes the ’536 patent, including at least claim 1 of the’536 patent.

201. At least since the date this First Amended Complaint was filed, Exablaze has engaged in such inducement with knowledge of the ’053 patent; with knowledge that others, including but not limited to customers and end-users, directly infringe

at least claim 1 of the ’536 patent; with knowledge of how Exablaze’s own conduct actively induces others, including but not limited to customers and end-users, to infringe claim 1 of the ’536 patent; and with the specific intent to cause such infringement, knowing that the others’ conduct constitutes direct infringement of at least claim 1 of the ’536 patent.

202. Exablaze has infringed, and continues to infringe, literally or under the doctrine of equivalents, at least claim 1 of the ’536 patent by offering to sell, selling, and importing the Exasock Library (and the send() call or the Kernel Support Module). At least since April 5, 2016, the date this action was filed, Exablaze knows that the Exasock Library (and the send() call or the Kernel Support Module) are not staple articles or commodities of commerce capable of substantial non-infringing use; that the Exasock Library (and the send() call or the Kernel Support Module) constitute a material part of the invention claimed by at least claim 1 of the ’536 patent; and that the Exasock Library (and the send() call or the Kernel Support Module) are especially made or adapted to infringe at least claim 1 of the ’536 patent.

203. Exablaze’s infringement of the ’536 patent has caused and continues to cause Solarflare irreparable harm for which there is no adequate remedy at law. The irreparable harm to Solarflare caused by Exablaze will continue, unless the Court enjoins Exablaze from continuing its infringing activities.

204. At least since the date this First Amended Complaint was filed, Exablaze's infringement of the '536 patent is and remains willful and deliberate.

RELIEF REQUESTED

Plaintiff requests that this Court:

A. Enter judgment that Exablaze has directly and indirectly infringed one or more claims of the Asserted Solarflare Patents.

B. Preliminarily and permanently enjoin Exablaze, and its officers, agents, servants, employees, representatives, distributers, resellers, and all persons acting in concert or participation with any of them, from committing further infringement of the Asserted Solarflare Patents.

C. Award Solarflare damages in accordance with 35 U.S.C. § 284, including all damages adequate to compensate it for Exablaze's infringement, in no event less than a reasonable royalty, such damages to be determined by a jury, and additionally an accounting sufficient to adequately compensate Solarflare, and that such damages be awarded Solarflare, together with interest, including prejudgment and post-judgment interest, and costs;

D. Enter judgment that Exablaze has willfully and deliberately committed acts of patent infringement, and award Solarflare treble damages in light of Exablaze's willful infringement of the Asserted Solarflare Patents pursuant to 35 U.S.C. § 284;

E. Determine that this is an "exceptional case" pursuant to 35 U.S.C. § 285 and award Solarflare its reasonable legal fees, costs, and expenses that it incurs in prosecuting this action;

F. Award Solarflare its costs, pre-judgment interest and post-judgment interest;

G. Award such other and further relief as the Court deems just and proper.

JURY DEMAND

Plaintiff demands a trial by jury of all issues so triable.

Dated: July 14, 2016

Respectfully submitted,

/s/ Thomas R. Curtin

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CERTIFICATION PURSUANT TO L. CIV. R. 11.2

Plaintiff, by its undersigned counsel, hereby certifies pursuant to Local Civil Rule 11.2 that the matters in controversy are not the subject of any other action pending in any court or of any pending arbitration or administrative proceeding.

Dated: July 14, 2016

Respectfully submitted,

/s/ Thomas R. Curtin

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