IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INTEL CORPORATION,) C.A. No. 14-377 (LPS) (CJB)
Plaintiff,) DEMAND FOR JURY TRIAL
V.)
FUTURE LINK SYSTEMS, LLC,)
Defendant.)

FIRST AMENDED COMPLAINT FOR DECLARATORY JUDGMENT

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March 20, 2015 - Original Filing Date March 23, 2015 - Redacted Filing Date Plaintiff Intel Corporation ("Intel"), for its First Amended Complaint against Defendant Future Link Systems, LLC ("Future Link"), hereby alleges as follows:

NATURE OF THE ACTION

1. This is an action for declaratory judgment that nine United States patents are not infringed, invalid, licensed, and/or exhausted pursuant to the Declaratory Judgment Act, 28 U.S.C. §§ 2201-02, and the Patent Laws of the United States, 35 U.S.C. § 100 *et seq.*, and for such other relief as the Court deems just and proper.

THE PARTIES

- 2. Plaintiff Intel is a corporation organized and existing under the laws of the State of Delaware having its principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054. Intel does business in this District.
- 3. Defendant Future Link is a limited liability company organized and existing under the laws of the State of Delaware that was formed in October 2012. Future Link's registered agent for service is National Corporate Research, Ltd., 615 Dupont Hwy., Dover, Delaware 19901. Future Link is in the business of enforcing and attempting to monetize patents. Future Link does not sell or offer for sale any products.

JURISDICTION AND VENUE

- 4. This Court has exclusive subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202, and the Patent Laws of the United States, 35 U.S.C. § 1 *et. seq.*
 - 5. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391.
- 6. This Court has personal jurisdiction over Future Link based at least upon Future Link's organization as a limited liability company under the laws of the State of Delaware.
- 7. This Court has subject matter jurisdiction over this action based on a real and immediate controversy between Future Link and Intel regarding whether various of Intel's

processors (CPUs), chipsets, PCI Express peripherals (e.g., solid state drives and RAID controllers), and motherboards infringe certain Future Link patents, and further whether those Future Link patents are invalid. As described in more detail below, this controversy arises out of Future Link's infringement allegations and licensing demands to multiple Intel customers in which Future Link broadly alleges its patents cover technologies implemented by Intel components, including allegedly infringing PCI Express, multi-function PCI device capability, Intel's QuickPath Interconnect ("QPI"), processors incorporating multiple thermal sensors into a processor core, memory modules, graphics cards, and processors capable of performing write combining. *See* Ex. 1 (listing processors, chipsets, motherboards, and PCI Express peripherals for which Future Link's allegations have created a controversy).

- 8. Future Link purports to be the owner of a portfolio of patents that, according to Future Link, allegedly "relate to a variety of products and technologies, such as: data interconnect and interface technologies, computer and network architecture, gaming devices, mobile phones, processors, memory, and other integrated circuits." According to Future Link, its alleged portfolio includes U.S. Patent Nos. 5,608,357; 5,870,570; 6,008,823; 6,108,738; 6,606,576; 6,622,108; 6,636,166; 6,920,576; and 7,478,302 (collectively, the "Patents-in-Suit"), as well as other U.S. Patents.
- 9. As set forth below, Future Link's demands to Intel's customers are based on Future Link's allegations that Intel's products, including the Intel components listed in Exhibit 1, and use of such products, infringe the Patents-in-Suit. As explained further herein, substantial evidence confirms Future Link's assertions of its patents against Intel's customers directly target Intel components, including that: (1) the Patents-in-Suit are directed to integrated circuit components that Intel supplies to Dell, Inc. ("Dell"), Hewlett Packard Co. ("HP"), and Promise

Technology Inc. ("Promise"), all of which received Future Link's letters asserting patent infringement and demanding license payments to Future Link; (2) Future Link's allegations specifically identify Intel's products by name as allegedly infringing; (3) Future Link's allegations, in some instances, target Intel's proprietary technologies; (4) Future Link's allegations target technologies where Intel supplies the vast majority of the market with such technologies; (5) Future Link targets Intel products by claiming infringement by *all* customer products that include chip components (e.g., CPUs and/or Southbridge chipsets) that provide certain technologies (e.g., PCI Express) when, in fact,

; and (6) Intel's customers that received Future Link's demands confirmed that Intel's chip components are targeted by Future Link's infringement allegations by contacting Intel and requesting that Intel indemnify them against those allegations and handle the threat directly with Future Link.

- 10. Desktop, laptop, and server computer products, such as those manufactured and sold by end-device makers like Dell and HP, typically have a basic computer architecture that includes, among other things, a central processing unit (CPU) and a Southbridge chipset. The Southbridge chipset manages basic input/output functions of a computer (e.g., Peripheral Component Interconnect (PCI), Universal Serial Bus (USB), and Ethernet). The Southbridge chipset communicates through an electronic pathway called a "bus" to the CPU, where the instructions of a computer program are carried out by performing the basic arithmetic, logical, control, and input/output operations specified by the instructions.
- 11. Intel is and has been for decades the world's preeminent supplier of CPU and chipset products for laptop, desktop, and server computers, including the CPU and chipset

products	accused of infringement by Future Link.
12	2. Intel supplies a substantial share of the chipset and CPU products to the customers
that were	e the target of Future Link's specific infringement threats and demands for licensing
payments	3.

OVERVIEW OF THE PATENTS ASSERTED BY FUTURE LINK

A. Assignment History Of The Patents-In-Suit

- 13. On information and belief, the Patents-in-Suit were assigned to Future Link in 2013. Prior to their assignment to Future Link, the Patents-in-Suit originated from applications filed by companies that, like Intel, were involved in the design and supply of computer chips. Specifically, VLSI Technology, Inc. filed the applications leading to the 5,608,357, 5,870,570, 6,008,823, and 6,108,738 patents between August 1995 and January 1999. VLSI and its semiconductor business was subsequently acquired by the Philips group of companies in approximately June of 1999. The application leading to the 6,920,576 patent was filed by Philips Semiconductor, Inc. The applications leading to the 6,606,576, 7,478,302, 6,636,166, and 6,622,108 patents were filed by Koninklijke Philips Electronics N.V. During these times, VLSI and Philips were engaged in the design and supply of computer chips and the Patents-in-Suit were filed and prosecuted by these chip companies to cover chip technologies. Accordingly, the patents all relate to technologies found on central processing units (CPUs) and chipsets.
- 14. In 2006, Philips's semiconductor business was bought by a consortium of private equity investors, becoming NXP Semiconductors. As its name confirms, NXP, like VLSI and Philips, is engaged in the design and supply of computer chips.
- 15. In 2010, NXP partnered with a patent assertion entity (PAE) known as IP Value Management, Inc. ("IP Value"). IP Value describes its business as "intellectual property commercialization," which it pursues through patent licensing and litigation. After "partnering" with IP Value, NXP allegedly divested hundreds of patents, including the Patents-in-Suit, to multiple PAEs via a Cayman Islands company called Partners for Corporate Research International ("PCRI"). According to the U.S.P.T.O. Assignments On The Web database, PCRI assigned the Patents-in-Suit to Future Link. PCRI also assigned hundreds of foreign patents,

including European counterparts of at least some of the Patents-in-Suit, to a foreign PAE called Link Systems International, B.V., ("Link Systems"). Future Link claims to be the owner of each of the Patents-in-Suit. Future Link further claims to be the owner of over 200 issued and pending U.S. patents transferred along with the Patents-in-Suit. Intel reserves all rights to amend this First Amended Complaint to seek a declaratory judgment of non-infringement or invalidity of any other issued or pending U.S. patent owned by Future Link.

16.

IP Value and

Future Link share employees, including counsel. IP Value also "partners" with other large PAEs, such as Round Rock Research, to pursue patent monetization. IP Value has assisted Intel's competitors, including Spansion, Inc. and NXP Semiconductors, in monetizing their patent portfolios. Of the five "partners" IP Value lists on its website, two are PAEs and two are Intel competitors.

17. Future Link has engaged in a campaign of asserting its patents against Intel's customers, including at least Dell, HP, and Promise, and has demanded licenses from these customers based on alleged incorporation and use of technologies provided by Intel components.

and is attempting to improperly

maximize licensing revenue by making demands on Intel's customers as opposed to engaging Intel, the company that supplies the chipset, CPU, and other products that are the subject of Future Link's claims.

B. Summary Of The Patents-In-Suit

- Integrated Circuit Device for Connecting to an External Bus" and bears an issuance date of February 9, 1999. A copy of the '570 patent is attached hereto as Exhibit 2. Intel became aware of the '570 patent on or about June 21, 2012 through its customers' indemnity demands related to patent infringement assertions made by NXP Semiconductors. The claims of the '570 patent are directed to features and technology on an integrated circuit. For example, Claims 1 and 8 of the '570 patent are specifically directed to integrated circuits, claiming a "multiple peripheral component interconnect (PCI) agent integrated circuit device." Likewise, Claims 15 and 17 are also directed to integrated circuits, claiming a "method of combining multiple peripheral component interconnect (PCI) agents into an integrated circuit device" and a "multiple bus agent integrated circuit device," respectively.
- 19. U.S. Patent No. 6,108,738 ("the '738 patent") is entitled "Multi-Master PCI Bus System within a Single Integrated Circuit" and bears an issuance date of August 22, 2000. A copy of the '738 patent is attached hereto as Exhibit 3. Intel became aware of the '738 patent on or about June 21, 2012 through its customers' indemnity demands related to patent infringement assertions made by NXP Semiconductors. The claims of the '738 patent are directed to features and technology on an integrated circuit. For example, Claim 1 of the '738 patent is specifically directed to a "multiple bus master PCI (peripheral component interconnect) bus system within an integrated circuit." Likewise, Claims 7 and 11 are directed to a "fully integrated, single semiconductor die PCI (peripheral component interconnect) bus system" and a method of

"fabricating a fully integrated, single semiconductor die PCI (peripheral component interconnect) bus system," respectively.

- 20. U.S. Patent No. 7,478,302 ("the '302 patent") is entitled "Signal Integrity Self-Test Architecture" and bears an issuance date of January 13, 2009. A copy of the '302 patent is attached hereto as Exhibit 4. Intel became aware of the '302 patent on or about June 21, 2012 through its customers' indemnity demands related to patent infringement assertions made by NXP Semiconductors. The claims of the '302 patent are directed to on-chip technology. For example, Claim 11 of the '302 patent is specifically directed to an "integrated circuit device comprising one or more modules, into each of which is incorporated one or more module monitors each operable to produce a measurement signal indicative of an operating parameter [e.g., temperature] of the module."
- 21. U.S. Patent No. 6,008,823 ("the '823 patent") is entitled "Method and Apparatus for Enhancing Access to a Shared Memory" and bears an issuance date of December 28, 1999. A copy of the '823 patent is attached hereto as Exhibit 5. Intel became aware of the '823 patent on or about April 26, 2013 through its customers' indemnity demands related to patent infringement assertions made by Future Link. The claims of the '823 patent are directed to on-chip technology. For example, Claim 1 of the '823 patent is specifically directed to an "Apparatus for controlling access to a memory," which Figure 1 of the patent shows operating using on-chip circuitry.
- 22. U.S. Patent No. 6,920,576 ("the '0576 patent") is entitled "Parallel Data Communication having Multiple Sync Codes" and bears an issuance date of July 19, 2005. A copy of the '0576 patent is attached hereto as Exhibit 6. Intel became aware of the '0576 patent on or about April 26, 2013 through its customers' indemnity demands related to patent

infringement assertions made by Future Link. The claims of the '0576 patent are directed to on-chip technology. For example, Claim 1 of the '0576 patent is specifically directed to integrated circuits, claiming a "parallel data communication arrangement susceptible to skewing digital data," which the specification explains is used for applications "where the parallel data communication path communicatively couples the two modules on a single chip." '0576 Patent, Col. 4:7-14.

- 23. U.S. Patent No. 5,608,357 ("the '357 patent") is entitled "High Speed Phase Aligner with Jitter Removal" and bears an issuance date of March 4, 1997. A copy of the '357 patent is attached hereto as Exhibit 7. Intel became aware of the '357 patent on or about April 26, 2013 through its customers' indemnity demands related to patent infringement assertions made by Future Link. The claims of the '357 patent are directed to on-chip technology. For example, Claim 1 of the '357 patent is directed to a "data retiming system for retiming incoming data," which the specification explains, "when the data is transmitted to another portion of a circuit board or across wires to another part of the digital logic system," is "the portion of the digital logic system receiving the incoming data." Ex. 7 at Col. 1:28-35; see also, e.g., id. at Fig. 4 (operating with on-chip circuitry).
- 24. U.S. Patent No. 6,606,576 ("the '6576 patent") is entitled "Real-Time Channel Calibration Method and Arrangement" and bears an issuance date of August 12, 2003. A copy of the '6576 patent is attached hereto as Exhibit 8. Intel became aware of the '6576 patent on or about April 26, 2012 through its customers' indemnity demands related to patent infringement assertions made by NXP Semiconductors. The claims of the '6576 patent are directed to on-chip technology. For example, Claim 1 of the '6576 patent is specifically directed to a "parallel data communication arrangement including circuitry for calibrating data," which the specification

explains is implemented "via an internal bus on a chip." Ex. 8 at Col. 3:50-62; see also, e.g., id. at Fig. 2 and Col. 5:35-39 ("the functionally-depicted blocks . . . can be implemented using a single chip (such as a CPU, an ASIC and/or other circuit configurations) or as a set of communicatively coupled circuits").

- 25. U.S. Patent No. 6,636,166 ("the '166 patent") is entitled "Parallel Communication Based on Balanced Data-Bit Encoding" and bears an issuance date of October 21, 2003. A copy of the '166 patent is attached hereto as Exhibit 9. Intel became aware of the '166 patent on or about April 26, 2013 through its customers' indemnity demands related to patent infringement assertions made by Future Link. The claims of the '166 patent are directed to on-chip technology. For example, Claim 1 of the '166 patent is specifically directed to a "parallel data communication arrangement in which digital data including logical ones and zeroes is transferred in parallel," which, according to the specification, "intercouples the two modules on a single-chip." Ex. 9 at Col. 4:50-59; *see also*, *id. at* Col. 1:55-60 ("A typical system might include a number of modules that interface to and communicate over a parallel data communication line (sometimes referred to as a data channel)," such as, for example, "a bus structure internal to a chip, other interconnect, or any combination of such communication media.").
- 26. U.S. Patent No. 6,622,108 ("the '108 patent") is entitled "Circuit with Interconnect Test Unit and a Method of Testing Interconnects between a First and a Second Electronic Circuit" and bears an issuance date of September 16, 2003. A copy of the '108 patent is attached hereto as Exhibit 10. Intel became aware of the '108 patent on or about June 21, 2012 through its customers' indemnity demands related to patent infringement assertions made by NXP Semiconductors. The claims of the '108 patent are directed to on-chip technology. For example, Claim 11 of the '108 patent is specifically directed to "A method of testing

interconnects between a first electronic circuit and a second electronic circuit" that comprises in part "putting test data on the interconnects by the second electronic circuit." Ex. 10 Col. 14:5-17.

FUTURE LINK'S CAMPAIGN AGAINST INTEL'S CUSTOMERS TARGETING INTEL'S PRODUCTS

A. NXP's Initial Demands

27. Before NXP divested the Patents-in-Suit to Future Link for monetization, NXP asserted five of the Patents-in-Suit against Intel's customer Dell and provided claim charts for some of the patents prepared by both NXP and IP Value — Future Link's present owner — expressly citing Intel components as responsible for providing the allegedly infringing functionality.

28.					
29.					
 29.					

B. Future Link's Demands To Intel Customers Dell, HP, and Promise

- 30. Once Future Link acquired the Patents-in-Suit, it (like NXP) approached Intel's customers with threats of infringement and demands that it be paid a license fee based on their use of Intel products. Future Link's allegations against Intel customers Dell, HP, and Promise directly targeted Intel components and put Intel components directly at issue.
- 31. On April 15, 2013, Future Link's Managing Director, Brian Marcucci (who is also IP Value's Senior Vice President of Licensing), sent a letter to the Dell Legal Department. One Dell Way: RR1-33, Round Rock, Texas 78682 ("the Dell Letter"). In the Dell Letter, Future Link claims to own "certain patents previously owned by NXP Semiconductors N.V. (NXP) which have been assigned to FLS." The letter adopts NXP's prior assertions against Dell. For example, the letter states that in "a letter dated October 3, 2011, NXP provided notice to Dell that NXP believed Dell required a license to [the '570, '738, '6576, '108, and '302 patents]." Future Link further claims to own "over 200 issued and pending U.S. patents" and accuses Dell of infringing, and continuing to infringe, either directly or indirectly, the Patents-in-Suit by, *inter* alia, "incorporat[ing] and us[ing] features and functionalities covered by these patents, including, for example," by certain "representative products" identified in Tables 1 and 2 to the Dell Letter. Tables 1 and 2 identify the technologies accused of infringement, which fall into 6 categories: (1) PCI; (2) PCI Express ("PCIe"); (3) QuickPath Interconnect ("QPI"); (4) processors that incorporate multiple thermal sensors into a processor core; (5) processors capable of writecombining; and (6) products that contain, use, and/or incorporate DDR3 SDRAM and DDR3

SDRAM memory modules. As alleged herein, these accused technologies are provided by Intel components that are incorporated into Dell products. Indeed, Dell's correspondence to Intel has consistently conveyed Dell's understanding that Future Link's allegations are directed to Intel's products. For example, Dell's May 20, 2013 email to Intel stated, "[t]he allegations of infringement against Dell appear to be based on the use of several Intel products in Dell computers." Thus, Future Link's allegations to Dell targeted Intel products with infringement of the Patents-in-Suit.

32. On April 15, 2013, Mr. Marcucci of Future Link and IP Value also sent a letter to the Executive Vice President and General Counsel of Hewlett Packard Company, 3000 Hanover Street, Palo Alto, California, 94304 ("the HP Letter"). In the HP Letter, Future Link again claims to own "over 200 issued and pending U.S. patents" and accuses HP of infringing, and continuing to infringe, either directly or indirectly, eight of the nine Patents-in-Suit asserted against HP, U.S. Patent Nos. 5,608,357; 5,870,570; 6,008,823; 6,108,738; 6,606,576; 6,622,108; 6,636,166; and 6,920,576 by, inter alia, making, using, or selling "products [that] incorporate and use features and functionalities covered by" these patents, including, for example, by certain allegedly "Infringing Products" identified in Table 1 to the HP Letter. Table 1 identifies specific technologies which fall into 5 categories: (1) PCI; (2) PCI Express ("PCIe"); (3) QuickPath Interconnect ("QPI"); (4) processors capable of write-combining; and (5) products that contain, use, and/or incorporate DDR3 SDRAM and DDR3 SDRAM memory modules. As alleged herein, these accused technologies are provided by Intel components that are incorporated into Indeed, HP's correspondence to Intel has consistently conveyed HP's HP products. understanding that Future Link's allegations are directed to Intel's products. For example, HP's May 29, 2013 letter to Intel stated, "[w]e believe FLS's allegations are clearly directed toward

components HP purchases from Intel ..." Thus, Future Link's allegations to HP targeted Intel products with infringement of eight of the Patents-in-Suit.

On or about June 2013, Future Link also sent a letter to Promise ("the Promise Letter"). In the Promise Letter, Future Link accuses Promise of infringing five of the Patents-in-Suit, including U.S. Patent Nos. 5,608,357; 6,606,576; 6,622,108; 6,636,166; and 6,920,576 by, *inter alia*, making, using, or selling certain "representative products." The technologies covered by the allegations against Promise fall into three categories: (1) PCI Express ("PCIe"); (2) QuickPath Interconnect ("QPI"); and (3) products that contain, use, and/or incorporate DDR3 SDRAM and DDR3 SDRAM memory modules. As alleged herein, these accused technologies are provided by Intel components that are incorporated into Promise products. Indeed, a June 17, 2013 email from Promise stated, "the [infringement] claim was caused by Intel chip[s]" and "Intel have to take the action for the captioned FLS patent issue immediately." Thus, Future Link's allegations to Promise targeted Intel products with infringement of five of the Patents-in-Suit.

C. The '570 And '738 Patents: Future Link's Infringement Allegations Are Directed To Intel's PCI Technology In Customer Products

34. PCI, like PCI Express, is a standardized computer bus technology defined by the PCI-SIG (Peripheral Component Interconnect Special Interest Group) standard setting organization. Intel was fundamental in early development and encouraging the industry's early adoption of standardized PCI technology.

1. Intel's PCI Technology In Dell Products

35. Future Link's allegations to Dell regarding the '570 and '738 patents are directed to PCI technology provided by Southbridge chipsets, including Intel Southbridge chipsets sold to and used in Dell's products. In its demand letter to Dell, Future Link first accuses Dell products

(including desktop, laptop, and server products) "using and/or containing" AMD Southbridge devices. Future Link then expands its infringement allegations by listing much broader categories of products that include Intel Southbridge chipsets, beginning with "All other Dell products using and/or containing Southbridge devices that incorporate multi-function PCI device capability into a single integrated circuit" and ultimately "All other products incorporating multi-function PCI device capability into a single integrated circuit." Ex. 13 at Table 1.

36. Intel has been making Southbridge chipsets that incorporate allegedly infringing multi-function PCI bus technology and selling them to Dell for years, including in 2013 and continuing today. Dell routinely incorporates such Intel Southbridge chipsets into its products, including the Dell products identified by Future Link in its demand letter. In fact, Dell is one of Intel's biggest customers, and

including the Intel Q77, C602, Q67, Q65, C216, and B75 chipsets, and numerous others. As one example, when Dell received Future Link's demands, Dell had been incorporating the Intel C216 Express Southbridge chipset into its Dell Precision Workstation T1650 computers—which is one of the Dell products within the scope of Future Link's infringement allegations. The Intel C216 Southbridge chipset provides the allegedly infringing multi-function PCI bus functionality in a single integrated circuit in those accused Dell computer products. As another example, Dell has incorporated the Intel B75 chipset into its Dell Vostro 270 computers—which is another of the Dell products within the scope of Future Link's infringement allegations. The Intel B75 chipset provides the allegedly infringing multifunction PCI bus functionality in a single integrated circuit in those accused Dell computer products. Intel further makes and sells (including selling to Dell) numerous other similar chipset products that provide allegedly infringing multi-function PCI device capability in a single

integrated circuit in its Original Equipment Manufacturer (OEM) customers' products, including for example, chipsets in Intel's ICH architecture (e.g., 82801XX and 82801XXX chipsets), P64H architecture (e.g., 82870P2 chipset), and PCH architecture (e.g., QS57, QM57, NM10, Q75, and C602J chipsets).

- 37. Given that Future Link's express allegations of infringement of the '570 and '738 patents (1) include "all other Dell products" with Southbridge chipsets providing multi-function PCI functionality and expressly extend to "all other products" incorporating multi-function PCI device functionality; and (2) Intel is the industry's leading supplier of Southbridge chipsets, to provide the allegedly infringing PCI functionality in Dell's accused computer products, Future Link's allegations unequivocally accuse Intel Southbridge chipsets of infringement.
- 38. In accordance with these facts, Dell recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '570 and '738 patents. Indeed, Dell contacted Intel on April 26, 2013, providing Future Link's April 15, 2013 assertion letter. Based on Future Link's allegations and demands, Dell contacted Intel again on May 20, 2013 and requested indemnity for Future Link's infringement allegations regarding the '570 and '738 patents. In the May 20 correspondence, Dell stated that Future Link's infringement allegations implicate products provided to Dell by Intel and, invoking the indemnity provision in Intel's supply agreements with Dell, sought indemnity from Intel for these allegations and asked Intel to resolve the matter directly with Future Link. After Intel reviewed Future Link's infringement allegations to Dell, Intel determined that Future Link was

accusing Intel of infringement for the '570 and '738 patents, and as set forth below, agreed to defend and indemnify Dell in connection with Future Link's assertions of those patents.

2. Intel's PCI Technology In HP Products

- 39. Future Link's allegations to HP regarding the '570 and '738 patents are directed to PCI technology provided by Southbridge chipsets, including Intel Southbridge chipsets sold to and used in HP's products. In its demand letter to HP, Future Link first accuses "All HP ENVY series desktop PCs using an AMD processor." Future Link then expands its infringement allegations by listing much broader categories of products, including "All other HP products" using or containing Southbridge devices that incorporate multi-function PCI device capability into a single integrated circuit, and ultimately "All other products" incorporating multi-function PCI device capability into a single integrated circuit. Ex. 14 at Table 1.
- 40. Intel has been making Southbridge chipsets that incorporate the allegedly infringing multi-function PCI bus technology and selling them to HP for years, including in 2013 and continuing today. HP routinely incorporates such Intel Southbridge chipsets into its products, including the products identified in Future Link's demand letter. In fact, HP is one of Intel's biggest customers, and

including the Intel C206 chipset, the Intel HM55 chipset, and numerous others. As one example, when HP received Future Link's demands, HP had been incorporating the Intel C206 Southbridge chipset into its HP Z210 CMT Workstation computers—which is one of the HP products within the scope of Future Link's infringement allegations. The Intel C206 Express Southbridge chipset provides the allegedly infringing multifunction PCI bus functionality in a single integrated circuit in those accused HP computer products. As another example, HP had been incorporating the Intel HM55 chipset into its HP 630 Notebook PC computers—which is another of the HP products within the scope of Future

Link's infringement allegations. The Intel HM55 chipset provides the allegedly infringing multifunction PCI bus functionality in a single integrated circuit in those accused HP's computer products. Intel further makes and sells (including selling to HP) numerous other similar chipset products that provide the allegedly infringing multi-function PCI bus functionality in a single integrated circuit in its OEM customers' products, including for example, chipsets in Intel's ICH architecture (e.g., 82801XX and 82801XXX chipsets), P64H architecture (e.g., 82870P2 chipset), and PCH architecture (e.g., QS57, QM57, NM10, Q75, and C602J chipsets).

- 41. Given that Future Link's express allegations of infringement of the '570 and '738 patents (1) include "All other HP products" with Southbridge chipsets providing multi-function PCI functionality, then extend to "All other products" incorporating multi-function PCI device functionality; and (2) Intel is the industry's leading supplier of Southbridge chipsets, to provide the allegedly infringing multi-function PCI bus functionality in HP's accused computer products, Future Link's allegations unequivocally accuse Intel Southbridge chipsets of infringement.
- 42. In accordance with these facts, HP recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '570 and '738 patents. Indeed, HP contacted Intel on May 29, 2013 and requested indemnity for Future Link's infringement allegations regarding the '570 and '738 patents. Based on Future Link's allegations and demands, HP contacted Intel on May 29, 2013 and provided notice of its indemnity request for Future Link's infringement allegations regarding the '570 and '738 patents. In the May 29 correspondence, HP stated that Future Link identified products provided to HP by Intel as

allegedly containing infringing technology, that HP was providing notice to Intel that claims of patent infringement have been made against technology provided to HP by Intel, and, invoking Intel's supply agreements with HP, further requested that Intel investigate the claims to determine if it would be necessary to defend or settle the allegations. After Intel reviewed Future Link's infringement allegations to HP, Intel determined that Future Link was accusing Intel of infringement for the '570 and '738 patents and, as set forth below, agreed to defend and indemnify HP in connection with Future Link's assertions of those patents.

D. The '6576, '357, And '166 Patents: Future Link's Infringement Allegations Are Directed To Intel's PCI Express Technology In Customer Products

43. PCI Express is a standardized I/O interconnect technology defined by the PCI-SIG (Peripheral Component Interconnect Special Interest Group) standard-setting organization. Intel was fundamental in its early development and encouraging the industry's early adoption of standardized PCIe technology.

1. Intel's PCI Express Technology In Dell Products

44. Future Link's allegations to Dell regarding the '6576, '357, and '166 patents are directed to allegedly infringing PCI Express (PCIe) technology provided by Southbridge chipsets, including Intel CPUs and chipsets sold to and used in Dell's products. Regarding the '6576 patent, in its demand letter to Dell, Future Link first accuses "All Dell Alienware Area 51 computers." Future Link then expands its infringement allegations by listing much broader categories of products that include Intel CPUs and chipsets, including "[a]Il Dell Inspiron series, Latitude series, Studio XPS series, XPS series, Adamo series, Alienware series, Precision series, Vostro series, OptiPlex series, and PowerEdge series products using, and/or supporting the PCI-Express (PCIe) standard." Regarding the '357 and '166 patents, Future Link first accuses "[a]Il Dell Inspiron 17R laptop computers." Future Link then expands its infringement allegations by

listing much broader categories of products that include Intel CPUs and chipsets, including "All other Dell tablet, netbook, laptop, desktop, workstation and server products using and/or supporting the PCI-Express (PCIe) standard." Future Link's allegations for the '6576, '357, and '166 patents additionally include "[a]ll other Dell products using and/or supporting the PCI-Express (PCIe) standard" and ultimately "[a]ll other products using and/or supporting the PCI-Express (PCIe) standard." Ex. 13 at Table 1 and Table 2.

45. Intel has been making chipsets and CPUs that incorporate allegedly infringing PCI Express functionality and selling them to Dell for years, including in 2013 and continuing today. Dell routinely incorporates such Intel chipsets and CPUs into its products, including the Dell products identified by Future Link in its demand letter.

In addition, Dell is one of Intel's biggest

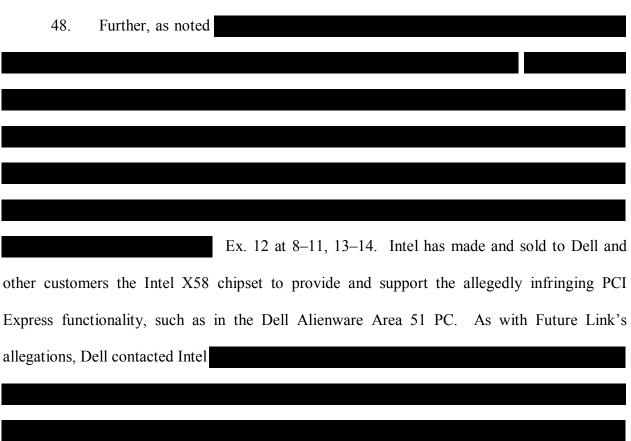
customers, and

including the Intel Core i3, i5 and i7 processors, and numerous others. As one example, when Dell Received Future Link's demands, Dell had been incorporating the Intel Core i7 processor and Intel X58 chipset into its Dell Alienware Area 51 desktop computers—which is one of the Dell products within the scope of Future Link's infringement allegations. The Intel Core i7 processor and X58 chipset provide the allegedly infringing PCI Express capability in that and other Dell products. As another example, Dell has incorporated the Intel Core i5-3317U processors and HM76 Express chipset into its Dell Inspiron 17R-5721 laptop computers—which is another of the Dell products within the scope of Future Link's infringement allegations. The Intel i5 processor and HM76 Express chipset provide the allegedly infringing PCI Express capability in that and other Dell products. Intel further makes and sells (including selling to

Dell) numerous other similar CPU and chipset products that provide PCI Express capability in its OEM customers' products, including for example, chipsets in Intel's ICH architecture (e.g., 82801XX and 82801XXX chipsets), IOH architecture (e.g., 7500 and 5500 chipsets), MCH architecture (e.g., 910, Q33, 5000, GM45, and E7 chipsets), PCH architecture (e.g., QM77, HM67, Q85, HM77, Q877, and NM10 chipsets), and SCH architecture (e.g., 3100, UL111, and US15 chipsets), and CPUs in Intel's Bonnell architecture (e.g., D2500, Z600, Z530, and E680 CPUs), Silvermont architecture (e.g., C2350, C2508, and Z3740 CPUs), Nehalem architecture (e.g., i3, i5, i7, and E55XX CPUs), Sandy Bridge architecture (e.g., G2020, i3, i5, i7, and E5 CPUs), and Haswell architecture (e.g., G1820, i3, i5, i7, and E3 CPUs).

- 46. Given that Future Link's express allegations of infringement of the '6576, '357, and '166 patents (1) include "all other Dell products using and/or supporting the PCI-Express (PCIe) standard" and extend to "all other products using and/or supporting the PCI-Express (PCIe) standard"; and (2) Intel is the industry's leading supplier of CPUs and chipsets, and to provide the allegedly infringing PCIe functionality in Dell's accused products, Future Link's allegations unequivocally accuse Intel CPUs and chipsets of infringement.
- 47. In accordance with these facts, Dell recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '6576, '357, and '166 patents. Indeed, Dell contacted Intel on April 26, 2013, providing Future Link's April 15,

2013 assertion letter. Based on Future Link's allegations and demands, Dell contacted Intel again on May 20, 2013 and requested indemnity for Future Link's infringement allegations regarding the '6576, '357, and '166 patents. In the May 20 correspondence, Dell stated that the tand further asserting the '357 and '166 patents; stated that Future Link's infringement allegations implicate products provided to Dell by Intel; and sought indemnity from Intel for these allegations and asked Intel to resolve the matter directly with Future Link. After Intel reviewed Future Link's infringement allegations to Dell, Intel determined that Future Link was accusing Intel of infringement for the '6576, '357, and '166 patents, and as set forth below, agreed to defend and indemnify Dell in connection with Future Link's assertions of those patents.



As noted above, when Future Link contacted Dell directly after acquiring the patents, it referred back to the patents, thereby itself adopting them.

2. Intel's PCI Express Technology In HP Products

- 49. Future Link's allegations to HP regarding the '6576, '357 and '166 patents are directed to allegedly infringing PCIe technology provided by chipsets and CPUs, including Intel chipsets and CPUs sold to and used in HP's products. In its demand letter to HP, Future Link first accuses "All HP ENVY series PCs." Future Link then expands its infringement allegations by listing much broader categories of products that include Intel chipsets and CPUs, beginning with "All other HP desktop, laptop, and server products" containing, using, and/or supporting the PCIe standard, then "All other HP products" containing, using, and/or supporting the PCIe standard, and ultimately "All other products" containing, using, and/or supporting the PCIe standard." Ex. 14 at Table 1.
- 50. Intel has been making chipsets and CPUs that incorporate allegedly infringing PCI Express functionality and selling them to HP for years, including in 2013 and continuing today. HP routinely incorporates such Intel chipsets and CPUs into its products, including the HP products identified by HP in its demand letter. In fact, HP is one of Intel's biggest customers, and

, including the Intel Core i7-3770 and i5-3317U processors, Intel Z75 and HM77 chipsets, and numerous others. As one example, when HP received Future Link's demands, HP had been incorporating the Intel i7-3770 processor and Intel Z75 chipset into its HP Envy h8-1520t desktop computer—which is one of the HP products within the scope of Future Link's infringement allegations. The Xeon i7-3770 processor and Intel Z75 chipset provide the allegedly infringing PCI Express technology in HP's computer products. As another example, HP had been incorporating the Intel i5-3317U processor and Intel HM77 chipset into its HP

ENVY Pro computer—which is another of the HP products within the scope of Future Link's infringement allegations. The Intel i5-3317U processor and Intel HM77 chipset provide the allegedly infringing PCI Express technology in HP's computer products. Intel further makes and sells (including selling to HP) numerous other similar CPU and chipset products that provide the allegedly infringing PCI Express technology in its OEM customers' products, including for example, chipsets in Intel's ICH architecture (e.g., 82801XX and 82801XXX chipsets), IOH architecture (e.g., 7500 and 5500 chipsets), MCH architecture (e.g., 910, Q33, 5000, GM45, and E7 chipsets), PCH architecture (e.g., QM77, HM67, Q85, HM77, Q877, and NM10 chipsets), and SCH architecture (e.g., 3100, UL111, and US15 chipsets), and CPUs in Intel's Bonnell architecture (e.g., D2500, Z600, Z530, and E680 CPUs), Silvermont architecture (e.g., C2350, C2508, and Z3740 CPUs), Nehalem architecture (e.g., i3, i5, i7, and E55XX CPUs), Sandy Bridge architecture (e.g., G2020, i3, i5, i7, and E5 CPUs), and Haswell architecture (e.g., G1820, i3, i5, i7, and E3 CPUs).

- 51. Given that Future Link's express allegations of infringement of the '6576, '357 and '166 patents (1) include "All other HP products" containing, using, and/or supporting the PCIe standard and extend to "All other products" containing, using, and/or supporting the PCIe standard; and (2) Intel is the industry's leading supplier of chipsets and CPUs, and to provide the allegedly infringing PCIe technology in HP's accused computer products, Future Link's allegations unequivocally accuse Intel chipsets and CPUs of infringement.
- 52. In accordance with these facts, HP recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '6576, '357 and

'166 patents. Indeed, HP contacted Intel on May 29, 2013 and provided notice of its indemnity request for Future Link's infringement allegations regarding the '6576, '357 and '166 patents. In the May 29 correspondence, HP stated that Future Link identified products provided to HP by Intel as allegedly containing infringing technology, that HP was providing notice to Intel that claims of patent infringement have been made against technology provided to HP by Intel and, invoking Intel's supply agreements with HP, requested that Intel investigate the claims to determine if it would be necessary to defend or settle the allegations. After Intel reviewed Future Link's infringement allegations to HP, Intel determined that Future Link was accusing Intel of infringement for the '6576, '357, and '166 patents, and as set forth below, agreed to defend and indemnify HP in connection with Future Link's assertions of those patents.

3. Intel's PCI Express Technology In Promise Products

- 53. Future Link's allegations to Promise regarding the '357, '6576 and '166 patents are directed to allegedly infringing PCIe technology provided by chipsets and CPUs, including Intel chipsets and CPUs used in Promise's products. In its demand letter to Promise, Future Link first accuses "PROMISE systems and/or products containing, using, and/or supporting the PCI-Express (PCIe) standard," then expands its infringement allegations to include "All other systems and/or products containing, using, and/or supporting the PCI-Express (PCIe) standard." Ex. 20-21.
- 54. Promise routinely incorporates Intel chipsets and CPUs with the allegedly infringing PCIe functionality into its products. For example, the Intel 3420 chipset is incorporated into the Promise VTrak Ex30 RAID series of storage subsystems—which is one of the Promise products within the scope of Future Link's infringement allegations. The Intel 3420 chipset provides the allegedly infringing PCIe functionality. In accordance with these facts,

Promise recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '357, '6576, and '166 patents.

E. The '823 Patent: Future Link's Infringement Allegations Are Directed to Intel Processors Capable of Write-Combining In Customer Products

1. Intel's Write-Combining Technology In Dell Products

- 55. Future Link's allegations to Dell regarding the '823 patent are directed to processors capable of write-combining, including Intel CPUs sold to and used in Dell's products. In its demand letter to Dell, Future Link first accuses "All Dell Inspiron 15 laptop computers." Future Link then expands its infringement allegations by listing much broader categories of products with CPUs capable of write-combining, beginning with "All Dell tablets, laptops, desktops, and servers" using and/or containing an AMD processor capable of write-combining, then "All other Dell products" using and/or containing an AMD processor capable of write-combining and ultimately "All other products" using and/or containing an AMD processor capable of write-combining. Ex. 13 at Table 2.
- 56. Intel has been making CPUs capable of the allegedly infringing write-combining and selling them to Dell for years, including in 2013 and continuing today. Dell routinely incorporates such Intel CPUs into its products, including the Dell products identified by Future Link in its demand letter. In fact, Dell is one of Intel's biggest customers, and including the Intel Core i3-3227U and Core i5-3210M processors, and numerous others. As one example, when Dell received Future Link's demands, Dell had been incorporating Intel Core i3-3227U processors

processors are capable of performing the allegedly infringing write-combining technology. As

into its Inspiron 15 3521 laptops—which is one of the specific Dell products identified in Future

Link's infringement allegations ("All Dell Inspiron 15 laptop computers").

another example. Dell had been incorporating Intel Core i5-3210M processors into its Inspiron 15R 5520 laptops (which are also part of the Inspiron 15 family)—which is another of the Dell products identified in Future Link's infringement allegations. These Intel processors are capable of the allegedly infringing write-combining technology. Intel further makes and sells (including selling to Dell) numerous other CPUs that are capable of performing the allegedly infringing write-combining technology and that are included in its OEM customers' products, including for example, CPUs in Intel's Bonnell architecture (e.g., D2500, Z600, Z530, and E680 CPUs), Silvermont architecture (e.g., C2350, C2508, and Z3740 CPUs), Netburst architecture (e.g., 352, 805, and 915 CPUs), P6 architecture (e.g., 320, 380, 710, 800, 900, T1, T2, and U1 CPUs), Core architecture (e.g., E1XXX, E2XXX, E5XXX, E6XXX, and E7XXX CPUs), Nehalem architecture (e.g., i3, i5, i7, and E55XX CPUs), Sandy Bridge architecture (e.g., G2020, i3, i5, i7, and E5 CPUs), Haswell architecture (e.g., G1820, i3, i5, i7, and E3 CPUs), Itanium architecture (e.g., 95XX and 93XX CPUs), and Itanium 2 architecture (e.g., 90X0 and 91X0M, and 91X0N CPUs).

57. Given that Future Link's express allegations of infringement of the '823 patent (1) target CPUs that provide write combining technology and (2) Intel is the industry's leading supplier of CPUs, and to provide the allegedly infringing write-combining technology in Dell's accused products, including processors for the

Dell Inspiron 15 laptop computers (all of which were accused of infringement), Future Link's allegations unequivocally accuse Intel CPUs of infringement.

In accordance with these facts, Dell recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '823 patent. Indeed, Dell contacted Intel on April 26, 2013, providing Future Link's April 15, 2013 assertion letter. Based on Future Link's allegations and demands, Dell contacted Intel again on May 20, 2013 and requested indemnity for Future Link's infringement allegations regarding the '823 patent. In the May 20 correspondence, Dell stated that Future Link's infringement allegations implicate products provided to Dell by Intel and, invoking the indemnity provision in Intel's supply agreements with Dell, sought indemnity from Intel for these allegations and asked Intel to resolve the matter directly with Future Link. After Intel reviewed Future Link's infringement allegations to Dell, Intel determined that Future Link was accusing Intel of infringement for the '823 patent, and as set forth below, agreed to defend and indemnify Dell in connection with Future Link's assertion of that patent.

2. Intel's Write-Combining Technology In HP Products

59. Future Link's allegations to HP regarding the '823 patent are directed to processors capable of allegedly infringing write-combining, including CPUs sold to and used in HP's products. In its demand letter to HP, Future Link first accuses "All HP 2000z-2c00 Notebook PCs." Future Link then expands its infringement allegations by listing much broader categories of products, including "All other HP tablets, laptops, desktops, and servers containing and/or using an AMD processor capable of performing Write-Combining," "All other HP products containing and/or using an AMD processor capable of performing Write-Combining," and ultimately "All other products containing and/or using an AMD processor capable of performing Write-Combining." Future Link's letter denotes the accused HP products as

"Representative Products." On information and belief, Future Link's allegations are not limited to the "Representative Products." Rather, it is accusing all HP products with a processor capable of performing write-combining of infringing the '823 patent, including those HP products containing an Intel processor. Ex. 14 at Table 1.

60. HP computers include Intel processors capable of allegedly infringing writecombining. Intel has been making CPUs that are capable of allegedly infringing writecombining and selling them to HP for years, including in 2013 and continuing today. HP routinely incorporates such Intel CPUs into its products. In fact, HP is one of Intel's biggest customers, and including Intel Core i3 processors, and numerous others. As one example, when HP received Future Link's demands, HP had been incorporating the Intel Core i3-2348M processor into its HP 2000-2c00 Notebook. This Intel processor is capable of performing the allegedly infringing write-combining functionality. Intel further makes and sells (including selling to HP) numerous other CPUs that include the allegedly infringing write-combining functionality and that are included in its OEM customers' products, including for example, CPUs in Intel's Bonnell architecture (e.g., D2500, Z600, Z530, and E680 CPUs), Silvermont architecture (e.g., C2350, C2508, and Z3740 CPUs), Netburst architecture (e.g., 352, 805, and 915 CPUs), P6 architecture (e.g., 320, 380, 710, 800, 900, T1, T2, and U1 CPUs), Core architecture (e.g., E1XXX, E2XXX, E5XXX, E6XXX, and E7XXX CPUs), Nehalem architecture (e.g., i3, i5, i7, and E55XX CPUs), Sandy Bridge architecture (e.g., G2020, i3, i5, i7, and E5 CPUs), Haswell architecture (e.g., G1820, i3, i5, i7, and E3 CPUs), Itanium architecture (e.g., 95XX and 93XX CPUs), and Itanium 2 architecture (e.g., 90X0 and 91X0M, and 91X0N CPUs).

- 61. Given that (1) Future Link is expressly targeting HP products that include CPUs capable of performing write-combining; and (2) Intel is the industry's leading supplier of CPUs, and to provide the allegedly infringing write-combining functionality in HP's accused computer products, Future Link's allegations unequivocally accuse Intel CPUs of infringement.
- 62. In accordance with these facts, HP recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '823 patent. Indeed, HP contacted Intel on May 29, 2013 and provided notice of its indemnity request for Future Link's infringement allegations regarding the '823 patent. In the May 29 correspondence, HP stated that Future Link identified products provided to HP by Intel as allegedly containing infringing technology, that HP was providing notice to Intel that claims of patent infringement have been made against technology provided to HP by Intel and, invoking Intel's supply agreements with HP, requested that Intel investigate the claims to determine if it would be necessary to defend or settle the allegations. After Intel reviewed Future Link's infringement allegations to HP, Intel determined that Future Link was accusing Intel of infringement for the '823 patent and, as set forth below, agreed to defend and indemnify HP in connection with Future Link's assertion of that patent.

F. The '0576 Patent: Future Link's Allegations Directed To QuickPath Interconnect (OPI) Technology In Customer Products

63. QPI is an Intel-developed and proprietary technology that is found on certain Intel processors, chipsets, and motherboards.

1. Intel's QPI Technology In Dell Products

64. Future Link's allegations to Dell regarding the '0576 patent are directed to Intel's proprietary QuickPath Interconnect technology provided by Intel CPUs and chipsets, including

Intel CPUs chipsets sold to and used in Dell's products. In its demand letter to Dell, Future Link identifies "All Dell PowerEdge series servers that support at least 2 Intel Xeon 5500, 5600, E5 or E7 series processors." Future Link then expands its infringement allegations by listing much broader categories of products that include Intel CPUs, beginning with "All other Dell desktop, workstation, and server products using and/or supporting QuickPath Interconnect (QPI)," then "All other Dell products using and/or supporting QuickPath Interconnect (QPI)," and ultimately "All other products using and/or supporting QuickPath Interconnect (QPI)." Ex. 13 at Table 2.

65. Intel has been making chipsets and CPUs that use and support allegedly infringing QPI and selling them to Dell for years, including in 2013 and continuing today. Dell routinely incorporates such Intel chipsets and CPUs into its products, including the Dell products identified by Future Link in its demand letter. In fact, Dell is one of Intel's biggest customers, and

that use and/or support the allegedly infringing QPI technology, including the Intel Core i3 and Xeon 7500 series processors, and numerous others. As one example, when Dell received Future Link's demands, Dell had been incorporating the Intel Core i3, i5, and i7 processors into its Dell Precision Workstation T1650—which is one of the Dell products within the scope of Future Link's infringement allegations. The Intel Core i3, i5, and i7 processors use and/or support the allegedly infringing QPI technology in Dell's computer products. As another example, Dell had been incorporating the Intel Xeon 7500 family of processors into its Dell PowerEdge R910 Servers—which is another of the Dell products within the scope of Future Link's infringement allegations. The Intel Xeon 7500 family of processors use and/or support the allegedly infringing QPI technology in Dell's computer products. Intel further makes and sells (including selling to Dell) numerous other similar CPU and chipset products, and motherboard products,

that use and/or support the allegedly infringing QPI technology in its OEM customers' products, including for example, chipsets in Intel's IOH architecture (e.g., 7500, 5500, 5520, and X58 chipsets), CPUs in Intel's Itanium architecture (e.g., 95X0 and 93X0 CPUs), Nehalem architecture (e.g., i3, i5, i7, and E5XXX CPUs), and Sandy Bridge architecture (e.g., E7 and E5 CPUs), and Intel motherboard products (e.g., computer module HNS2600, server S1200, server 1400, server 2400, and workstation W2600 motherboards).

and, as noted above, QPI is an Intel proprietary technology.

66. Given that Future Link's express allegations of infringement of the '0576 patent (1) include "All Dell PowerEdge series servers that support at least 2 Intel Xeon 5500, 5600, E5 or E7 processors" and extend to "[a]ll other products" using and/or supporting QuickPath Interconnect (QPI), and (2)

infringing QPI technology in Dell's accused computer and server products, Future Link's allegations unequivocally accuse Intel chipsets and CPUs of infringement.

to provide the allegedly

67. In accordance with these facts, Dell recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '0576 patent. Indeed, Dell contacted Intel on April 26, 2013, providing Future Link's April 15, 2013 assertion letter. Based on Future Link's allegations and demands, Dell contacted Intel again on May 20, 2013 and requested indemnity for Future Link's infringement allegations regarding the '0576

patent. In the May 20 correspondence, Dell stated that Future Link's infringement allegations implicate products provided to Dell by Intel and, invoking the indemnity provision in Intel's supply agreement with Dell, sought indemnity from Intel for these allegations and asked Intel to resolve the matter directly with Future Link. After Intel reviewed Future Link's infringement allegations to Dell, Intel determined that Future Link was accusing Intel of infringement for the '0576 patent, and as set forth below, agreed to defend and indemnify Dell in connection with Future Link's assertion of that patent.

68. In addition to Future Link's assertions against Dell described above, on March 19, 2013, Link Systems, a foreign PAE affiliate of Future Link, filed a complaint against Intel's customer Fujitsu in Munich, Germany for alleged infringement of the European counterpart to the '0576 patent, having substantially the same written description as the '0576 patent and claims that are substantially similar to the claims of the '0576 patent. In that action, Link Systems expressly claimed that Fujitsu infringed the German counterpart by offering and supplying products that incorporated or used Intel's QPI capable processors (CPUs), such as Intel Xeon E5-26XX and Intel Xeon 5500 and 5600 series CPUs, provided to Fujitsu by Intel. More specifically, Link Systems targeted bitlock and bytelock functionality within QPI as allegedly satisfying the patent claim elements.

2. Intel's QPI Technology In HP Products

69. Future Link's allegations to HP regarding the '0576 patents are directed to Intel's QPI technology provided by chipsets and CPUs, including Intel chipsets and CPUs sold to and used in HP's products. In its demand letter to HP, Future Link first accuses "All HP ProLiant DL560 Gen8 Servers." Future Link then expands its infringement allegations by listing much broader categories of products, beginning with "All other HP ProLiant series servers" using and/or supporting QuickPath Interconnect (QPI), then "All other HP computer and server

products" using and/or supporting QuickPath Interconnect (QPI), and ultimately "All other products" using and/or supporting QuickPath Interconnect (QPI). Ex. 14 at Table 1.

70. Intel has been making chipsets and CPUs that use and support the allegedly infringing QPI technology and selling them to HP for years, including in 2013 and continuing today. HP routinely incorporates such Intel chipsets and CPUs into its products, including the HP products identified by Future Link in its demand letter. In fact, HP is one of Intel's biggest customers, and

that use and/or support the allegedly infringing Intel QPI technology, including the Intel Xeon X5690 and Xeon E5-4600 processors, and numerous others. For example, when HP received Future Link's demands, HP had been incorporating the Intel Xeon X5690 processor and 5520 chipset into its ProLiant DL360 Generation 7 server— which is one of the HP products within the scope of Future Link's infringement allegations. As another example, HP had been incorporating the Intel E5-4600 series of processors into its ProLiant DL560 Generation 8 servers—which is another of the HP products within the scope of Future Link's demands. The Intel Xeon X5690 and E5-4600 processors use and/or support the allegedly infringing Intel QPI technology in HP's computer products. Intel further makes and sells (including selling to HP) numerous other similar CPU and chipset products, and motherboard products, that use and/or support the allegedly infringing Intel QPI technology in its OEM customers' products, including for example, chipsets in Intel's IOH architecture (e.g., 7500, 5500, 5520, and X58 chipsets), CPUs in Intel's Itanium architecture (e.g., 95X0 and 93X0 CPUs), Nehalem architecture (e.g., i3, i5, i7, and E5XXX CPUs), and Sandy Bridge architecture (e.g., E7 and E5 CPUs), and Intel motherboard products (e.g., computer module HNS2600, server S1200, server 1400, server 1600, server 2400, and workstation W2600 motherboards).

71. Given that Future Link's express allegations of infringement of the '0576 patent (1) include "All HP ProLiant series servers" using and/or supporting QuickPath Interconnect (QPI) and "All other products" using and/or supporting QuickPath Interconnect (QPI); and (2) Intel is the industry's leading supplier of chipsets and CPUs, and to provide the allegedly infringing QPI functionality in HP's accused computer and server products, Future Link's allegations unequivocally accuse Intel chipsets and CPUs of infringement.

72. In accordance with these facts, HP recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '0576 patent. Indeed, HP contacted Intel on May 29, 2013 and provided notice of its indemnity request for Future Link's infringement allegations regarding the '0576 patent. In the May 29 correspondence, HP stated that Future Link identified products provided to HP by Intel as allegedly containing infringing technology, that HP was providing notice to Intel that claims of patent infringement have been made against technology provided to HP by Intel and, invoking Intel's supply agreements with HP, requested that Intel investigate the claims to determine if it would be necessary to defend or settle the allegations. After Intel reviewed Future Link's infringement allegations to HP, Intel determined that Future Link was accusing Intel of infringement for the '0576 patent, and as set forth below, agreed to defend and indemnify HP in connection with Future Link's assertion of that patent.

3. Intel's QPI Technology In Promise Products

- 73. Future Link's allegations to Promise regarding the '0576 patent are directed to processors that include Intel's QPI technology. In its demand letter to Promise, Future Link first accuses "PROMISE systems and/or products" that support QuickPath Interconnect (QPI), then expands its allegations to include "All other systems and/or products" that support QPI. Ex. 20-21.
- As noted herein, QPI is an Intel proprietary technology that is found on and supported by Intel processors, chipsets, and motherboards. Promise routinely incorporates Intel processors with the allegedly infringing QPI technology into its products. For example, Intel Xeon Quad Core processors are found in Promise VTrak S3000 SAN Appliance systems—which is one of the Promise products within the scope of Future Link's infringement allegations. The Intel Xeon Quad Core processors include the allegedly infringing Intel QPI technology.

 that support the accused Intel QPI technology. In accordance with these facts, Promise recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '0576 patent.
 - G. The '108 Patent: Future Link's Infringement Allegations Are Directed To Intel's DDR3 SDRAM and DDR3 SDRAM Technology In Customer Products
 - 1. Intel's DDR3 SDRAM and DDR3 SDRAM Technology In Dell Products
- 75. Future Link's allegations to Dell regarding the '108 patent are directed to chipsets and processors that contain, use, and/or incorporate DDR3 SDRAM and DDR3 SDRAM memory modules, including Intel CPUs sold to and used in Dell's products. In its demand letter to Dell, Future Link first accuses "All Dell Inspiron 570 and Dell Studio XPS 7100 Desktop computers." Future Link then expands its infringement allegations by listing much broader

categories of products that include chipsets and CPUs that contain, use, and/or incorporate DDR3 SDRAM and DDR3 SDRAM memory modules, including "All Dell Inspiron series, Latitude series, Studio XPS series, XPS series, Adamo series, Alienware series, Precision series, Vostro series, OptiPlex series, and PowerEdge series products containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM memory modules, and/or GDDR5 SGRAM," then "All other Dell products containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM memory modules, and/or GDDR5 SGRAM," and ultimately "All other products containing, using and/or incorporating DDR3 SDRAM memory modules, and/or GDDR5 SGRAM," Ex. 13 at Table 1.

76. Dell computers include Intel chipsets and processors that use and/or interface with DDR3 SDRAM and DDR3 SDRAM memory modules and implement the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules. Intel has been making chipsets and CPUs that use the allegedly infringing functionality and selling them to Dell for years, including in 2013 and continuing today. Dell routinely incorporates such Intel chipsets and CPUs into its products, including the Dell products identified by Future Link in its demand letter.

In fact,

including the Intel Core i3, i5, and i7

processors, and numerous others. As one example, when Dell received Future Link's demands, Dell had been incorporating the Intel Core i3 and Core i5 processors into its Dell Vostro 2420 laptop—which is one of the Dell products within the scope of Future Link's infringement allegations. The Intel Core i3 and i5 series processors use and/or interface with DDR3 SDRAM

and DDR3 SDRAM memory modules and implement the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules. As another example. Dell had been incorporating Intel Core i3. Core i5. and Core i7 processors into Dell's Precision Workstation T1650 desktop computer—which is another of the Dell products within the scope of Future Link's infringement allegations. The Core i3, i5, and i7 processors use and/or interface with DDR3 SDRAM and DDR3 SDRAM memory modules and implement the allegedly infringing technology of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules. Intel further makes and sells (including selling to Dell) numerous other CPUs and chipsets that use the allegedly infringing technology and that are included in its OEM customers' products, including for example, chipsets in Intel's MCH architecture (e.g., X38, X48, GL40, GM45, G4X, P43, P45, and Q45 chipsets), and CPUs in Intel's Bonnell architecture (e.g., D2500, N2600, and S1220 CPUs), Silvermont architecture (e.g., C23X0, C25XX, and Z37XX CPUs), Nehalem architecture (e.g., i3, i5, i7, E65XX, E75XX, and X75XX CPUs), Sandy Bridge architecture (e.g., i3, i5, i7, E3, and E5 CPUs), Haswell architecture (e.g., G3220, i3, i5, i7, and E3 CPUs), and Itanium architecture (e.g., 93X0 and 95X0 CPUs).

77. Given that Future Link's allegations of infringement of the '108 patent (1) target chipsets and CPUs that communicate with DDR3 SDRAM and DDR3 SDRAM memory modules; and (2) Intel is the industry's leading supplier of chipsets and CPUs, and to provide the allegedly infringing technology in Dell's

accused products, Future Link's allegations unequivocally accuse Intel chipsets and CPUs of infringement.

78. In accordance with these facts, Dell recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '108 patent. Indeed, Dell contacted Intel on April 26, 2013, providing Future Link's April 15, 2013 assertion letter. Based on Future Link's allegations and demands, Dell contacted Intel again on May 20, 2013 and requested indemnity for Future Link's infringement allegations regarding the '108 patent. In the May 20 correspondence, Dell stated that Future Link's infringement allegations implicate products provided to Dell by Intel and, invoking the indemnity provision in Intel's supply agreement with Dell, sought indemnity from Intel for these allegations and asked Intel to resolve the matter directly with Future Link. After Intel reviewed Future Link's infringement allegations to Dell, Intel determined that Future Link was accusing Intel of infringement for the '108 patent, and as set forth below, agreed to defend and indemnify Dell in connection with Future Link's assertion of that patent.

2. Intel's DDR3 SDRAM and DDR3 SDRAM Technology In HP Products

79. Future Link's allegations to HP regarding the '108 patent are directed to processors and chipsets that contain, use, and/or incorporate with DDR3 SDRAM and DDR3 SDRAM memory modules, including Intel processors and chipsets sold to and used in HP's products. In its demand letter to HP, Future Link first accuses "All HP 2000t-2c00 Notebook PCs." Future Link then expands its infringement allegations by listing much broader categories of products, including "All other HP 2000 series notebook PCs" containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM memory modules, and/or GDDR5 SGRAM, then "All other HP products" containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM

memory modules, and/or GDDR5 SGRAM, and ultimately "All other products" containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM memory modules, and/or GDDR5 SGRAM. Ex. 14 at Table 1.

80. HP computers, including HP 2000t-2c00 Notebook PCs, include Intel processors and chipsets that use and/or interface with DDR3 SDRAM and DDR3 SDRAM memory modules and implement the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules. Intel has been making chipsets and CPUs that use the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules and selling them to HP for years, including in 2013 and continuing today. HP routinely incorporates such Intel chipsets and CPUs into its products, including the HP products identified by Intel in its demand letter. In fact, HP is one of Intel's biggest customers, and

including the Intel Core i3-2348M, i5-3317U, and E3-1290 processors, and numerous others. As one example, when HP received Future Link's demands, HP had been incorporating the Intel Core i3-2348M processor into its 2000t-2c00 computer—which is one of the HP products within the scope of Future Link's infringement allegations. The Intel Core i3-2348M processor uses and/or interfaces with DDR3 SDRAM and DDR3 SDRAM memory modules and implements the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules. As another example, HP had been incorporating the Intel Core i5-3317U processor into its HP ENVY Pro computers—which is another of the HP products within the scope of Future Link's infringement allegations. The Intel Core i5-3317U processor uses and/or interfaces with DDR3 SDRAM and DDR3 SDRAM memory modules and implements the allegedly infringing functionality of communicating with

DDR3 SDRAM and DDR3 SDRAM memory modules. As another example, HP has incorporated the Xeon E3-1290 processor into its HP Z210 CMT Workstation—which is another of the HP products within the scope of Future Link's infringement allegations. The Xeon E3-1290 processor uses and/or interfaces with DDR3 SDRAM and DDR3 SDRAM memory modules and implements the allegedly infringing functionality of communicating with DDR3 SDRAM memory modules. Intel further makes and sells (including selling to HP) numerous other CPUs and chipsets that include the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules that are included in its OEM customers' products, including for example, chipsets in Intel's MCH architecture (e.g., X38, X48, GL40, GM45, G4X, P43, P45, and Q45 chipsets), and CPUs in Intel's Bonnell architecture (e.g., D2500, N2600, and S1220 CPUs), Silvermont architecture (e.g., C23X0, C25XX, and Z37XX CPUs), Nehalem architecture (e.g., i3, i5, i7, E65XX, E75XX, and X75XX CPUs), Sandy Bridge architecture (e.g., i3, i5, i7, E3, and E5 CPUs), Haswell architecture (e.g., G3220, i3, i5, i7, and E3 CPUs), and Itanium architecture (e.g., 93X0 and 95X0 CPUs).

81. Given that Future Link's express allegations of infringement of the '108 patent (1) target chipsets and processors that contain, use, and/or incorporate DDR3 SDRAM, and DDR3 SDRAM memory modules; and (2) Intel is the industry's leading supplier of CPUs, and to provide the allegedly infringing functionality in HP's accused computer products, Future Link's allegations unequivocally accuse Intel CPUs of infringement.

82. In accordance with these facts, HP recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '108 patent. Indeed, HP contacted Intel on May 29, 2013 and provided notice of its indemnity request for Future Link's infringement allegations regarding the '108 patent. In the May 29 correspondence, HP stated that Future Link identified products provided to HP by Intel as allegedly containing infringing technology, that HP was providing notice to Intel that claims of patent infringement have been made against technology provided to HP by Intel and, invoking the Intel's supply agreements with HP, further requested that Intel investigate the claims to determine if it would be necessary to defend or settle the allegations. After Intel reviewed Future Link's infringement allegations to HP, Intel determined that Future Link was accusing Intel of infringement for the '108 patent, and as set forth below, agreed to defend and indemnify HP in connection with Future Link's assertion of that patent.

3. Intel's DDR3 SDRAM and DDR3 SDRAM Technology In Promise Products

- 83. Future Link's allegations to Promise regarding the '108 patent are directed to processors that contain, use, and/or incorporate DDR3 SDRAM and DDR3 SDRAM memory modules. In its demand letter to Promise, Future Link first accuses PROMISE systems and/or products "containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM memory modules, and/or GDDR5 SGRAM." It then expands its infringement allegations by accusing "All other systems and/or products" containing, using and/or incorporating DDR3 SDRAM, DDR3 SDRAM memory modules, and/or GDDR5 SGRAM. Ex. 20-21.
- 84. Promise routinely incorporates Intel processors that use and/or interface with DDR3 SDRAM and DDR3 SDRAM memory modules and implement the allegedly infringing technology of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules into

its products. For example, the Intel Xeon Quad Core processors are used in Promise VTrak S3000 SAN Appliance systems—which is one of the Promise products within the scope of Future Link's infringement allegations. The Intel Xeon Quad Core processors use and/or interface with DDR3 SDRAM and DDR3 SDRAM memory modules and implement the allegedly infringing functionality of communicating with DDR3 SDRAM and DDR3 SDRAM memory modules. In accordance with these facts, Promise recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '108 patent.

H. The '302 Patent: Future Link's Infringement Allegations Are Directed to Intel's Thermal Sensor Technology In Customer Products

1. Intel's Thermal Sensor Technology In Dell Products

- 85. Future Link's allegations to Dell regarding the '302 patent are directed to allegedly infringing multiple thermal sensor technology provided on CPUs, including Intel CPUs sold to and used in Dell's products. In its demand letter to Dell, Future Link first accuses Dell products "using and/or containing" AMD Opteron Quad-Core processors. Future Link then expands its infringement allegations by listing much broader categories of products that include Intel CPUs, beginning with "All other Dell products using and/or containing a processor that incorporate multiple thermal sensors into a processor core, such as a central processing unit (CPU)" and ultimately "All other products using and/or containing a processor that incorporate[s] multiple thermal sensors into a processor core, such as a central processing unit (CPU)..." Ex. 13 at Table 1.
- 86. The allegedly infringing multiple thermal sensor technology is found in processors (CPUs). Intel has been making such CPUs and selling them to Dell for years, including in 2013 and continuing today. Dell routinely incorporates such Intel CPUs into its

products, including the Dell products identified by Future Link in its demand letter. In fact, Dell is one of Intel's biggest customers, and

including the Intel Core i3, i5, and i7 processors, and numerous others. As one example, when Dell received Future Link's demands, Dell had been incorporating the Intel Core i3 and Core i5 processors into its Dell Vostro 2420 laptop computers—which is one of the Dell products within the scope of Future Link's infringement allegations. The Intel Core i3 and Core i5 processors include the allegedly infringing multiple thermal sensor technology. As another example, Dell had been incorporating the Intel Core i3, Core i5, and Core i7 processors into its Dell Precision Workstation T1650—which is another of the Dell products within the scope of Future Link's infringement allegations. The Intel Core i7 processors also include the allegedly infringing multiple thermal sensor technology. Intel further makes and sells (including selling to Dell) numerous other CPUs that include the allegedly infringing multiple thermal sensor technology and are included in its OEM customers' products, including for example, CPUs in Intel's Bonnell architecture (e.g., D2500, Z600, Z530, and E680 CPUs), Silvermont architecture (e.g., C2350, C2508, and Z3740 CPUs), Netburst architecture (e.g., 352, 805, and 915 CPUs), P6 architecture (e.g., 320, 380, 710, 800, 900, T1, T2, and U1 CPUs), Core E1XXX, E2XXX, E5XXX, E6XXX, and E7XXX CPUs), Nehalem architecture (e.g., architecture (e.g., i3, i5, i7, and E55XX CPUs), Sandy Bridge architecture (e.g., G2020, i3, i5, i7, and E5 CPUs), Haswell architecture (e.g., G1820, i3, i5, i7, and E3 CPUs), Itanium architecture (e.g., 95XX and 93XX CPUs), and Itanium 2 architecture (e.g., 90X0 and 91X0M, and 91X0N CPUs).

- 87. Given that Future Link's express allegations of infringement of the '302 patent (1) include "All other Dell products" using a processor that incorporates multiple thermal sensors into a processor core, and "all other products" using a processor that incorporate multiple thermal sensors into a processor core; and (2) Intel is the industry's leading supplier of CPUs, and to provide the allegedly infringing thermal sensor technology in Dell's accused products, Future Link's allegations unequivocally accuse Intel CPUs of infringement.
- 88. In accordance with these facts, Dell recognized that Future Link's infringement allegations targeted Intel components as the basis of infringement regarding the '302 patent. Indeed, Dell contacted Intel on April 26, 2013, providing Future Link's April 15, 2013 assertion letter. Based on Future Link's allegations and demands, Dell contacted Intel again on May 20, 2013 and requested indemnity for Future Link's infringement allegations regarding the '302 patent. In the May 20 correspondence, Dell stated that Future Link's infringement allegations implicate products provided to Dell by Intel and, invoking the indemnity provision in Intel's supply agreements with Dell, sought indemnity from Intel for these allegations and asked Intel to resolve the matter directly with Future Link. After Intel reviewed Future Link's infringement allegations to Dell, Intel determined that Future Link was accusing Intel of infringement for the '302 patent, and as set forth below, agreed to defend and indemnify Dell in connection with Future Link's assertion of that patent.

INTEL'S INDEMNITY OBLIGATIONS

89. Intel received indemnity demands from Dell, HP, and Promise based on Future Link's patent infringement accusations described above. Sales of Intel products to Dell are governed by agreements that obligate Intel to defend and indemnify Dell for third-party patent infringement claims. Ex. 15. Dell requested defense and indemnity from Intel on April 26, 2013

and May 20, 2013 for Future Link's infringement assertions. Intel is obligated and, before filing its March 24, 2014 Complaint, accepted its duty to defend and indemnify Dell for Future Link's patent infringement claims based on the use or inclusion of Intel components in Dell products, including payment of infringement damages if awarded to Future Link. Intel accepted its obligation and duty to defend and indemnify Dell for all of the patents identified in Future Link's letter to Dell and, on that basis, filed the March 24, 2014 Complaint. Intel has confirmed to Dell in writing Intel's duty and obligation to defend and indemnify Dell as a result of Future Link's claims for patent infringement. Ex. 16.

- 90. Sales of Intel products to HP are governed by agreements that obligate Intel to defend and indemnify HP for third-party patent infringement claims. Ex. 17. HP requested defense and indemnity from Intel on May 29, 2013 for Future Link's infringement assertions. Intel is obligated and before filing its March 24, 2014 Complaint, accepted its duty to defend and indemnify HP for Future Link's patent infringement claims based on use or inclusion of Intel components in HP products, including payment of infringement damages if awarded to Future Link. Intel accepted its obligation and duty to defend and indemnify HP for all of the patents identified in Future Link's letter to HP and, on that basis, filed the March 24, 2014 Complaint. Intel has confirmed to HP in writing Intel's duty and obligation to defend and indemnify HP as a result of Future Link's claims for patent infringement. Ex. 18.
- 91. Promise purchases Intel components for the accused products through a distributor. Intel's sales of those components are governed by Intel's Standard Terms & Conditions of Sale, which obligate Intel to defend and indemnify for third-party patent infringement claims. Ex. 19. Promise requested indemnity from Intel for Future Link's

infringement assertions on June 17, 2013. On these bases, Intel filed the March 24, 2014 Complaint.

INTEL'S FURTHER ACTS REGARDING THE INTEL PRODUCTS <u>ACCUSED BY FUTURE LINK</u>

With knowledge of the Patents-in-Suit as described above in paragraphs 18-26,

92.

93. Intel has provided information to its customers and the general public regarding the specifications, use, performance, and incorporation of the Intel products and technologies that Future Link has alleged infringe the Patents-in-Suit. Intel has provided such information through product demonstrations, product samples sent to customers for use and testing, discussions between Intel and its customers, and documents, including documents available on Intel's websites such as ark intel com. Intel instructs and encourages its customers like Dell, HP, and Promise to use Intel's components in ways that Future Link alleges infringe the Patents-in-Suit, including by incorporating such Intel components into the Dell, HP, and Promise accused

end-devices, which are used by Dell, HP, Promise and their respective end-user customers that operate, for example, the accused laptop, desktop, and server end-devices.

94. More specifically and by way of example, regarding the '570 and '738 patents, Intel has sold the Intel Q77, Q67, Q65, C216, B75, C206, and HM55 chipsets which, according to Future Link's allegations against Dell and/or HP, incorporate the allegedly infringing multifunction PCI device capability into a single integrated circuit. With respect to the apparatus and/or system claims of the '570 and '738 patent, Future Link's assertions target multi-function PCI bus technologies on Intel's chipset products as infringing. With respect to the method claims of the '570 and '738 patents, which relate to the fabrication of infringing systems or apparatuses, Future Link's assertions similarly target Intel as the manufacturer of such allegedly infringing products. In addition, Intel fabricates within the U.S. chipsets, such as Tiger Point PCH chipsets, that are targeted by Future Link's assertions against multi-function PCI bus technologies on chipsets as allegedly infringing. Intel provides and makes available product literature and instructions regarding these chipsets, describing the allegedly infringing PCI bus functionality with Intel's knowledge and intent that such products will be incorporated into enddevices like those sold by its customers Dell, HP, and Promise, and that such customers will use the functionality enabled by Intel's products, which functionality Future Link has alleged infringes the '570 and '738 patents. Based on Future Link's allegations with respect to the '570 and '738 patents broadly claiming that any product that incorporates multi-function PCI device capability into a single integrated circuit infringes no matter how it is used, Future Link contends that products allegedly incorporating such capability such as Intel's Q77, Q67, Q65, C216, B75, C206, and HM55 chipsets, when incorporated and used in end-devices by Dell, HP, Promise, and other customers, constitute at least a material component of an apparatus for use in practicing the

claims of the '570 and '738 patents with knowledge that the same is especially made or adapted for use in practicing those claims, and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Intel denies these allegations by Future Link.

95. More specifically and by way of example, regarding the '166, '357, and '6576 patents, Intel has sold the Intel Core i3, Core i5, Core i7, Xeon E5, Xeon E7, Xeon X, i7-3770, and i5-3317U processors, as well as the Intel X58, QM77, HM76, Z75, HM77, 5520, and 7300 chipsets, which, according to Future Link's allegations against Dell, HP, and/or Promise, incorporate the allegedly infringing PCI Express functionality. With respect to the apparatus and/or system claims of the '166, '357, and '6576 patents, Future Link's assertions target the PCI Express technologies on Intel's processor, chipset, and PCI Express peripheral products as infringing. With respect to the method claims of the '166 and '6576 patents, the Intel processor, chipset, and PCI Express peripheral products, in use and operation, provide the allegedly infringing PCI-Express technologies, which are the target of Future Link's assertions. Intel provides and makes available product literature and instructions regarding these processors, chipsets, and PCI Express peripheral products describing the allegedly infringing PCI Express functionality with Intel's knowledge and intent that such products will be incorporated into enddevices like those sold by its customers Dell, HP, and Promise, and that such customers will use the functionality enabled by Intel's products, which functionality Future Link has alleged infringes the '166, '357, and '6576 patents. Based on Future Link's allegations with respect to the '166, '357, and '6576 patents broadly claiming that any product that incorporates the allegedly infringing PCI Express technology infringes no matter how it is used, Future Link contends that Intel products such as its Core i3, Core i5, Core i7, Xeon E5, Xeon E7, Xeon X, i7-3770, and i5-3317U processors, as well as X58, QM77, HM76, Z75, HM77, 5520, and 7300

chipsets, when incorporated and used in end-devices by Dell, HP, Promise, and other customers, constitute at least a material component of an apparatus for use in practicing the claims of the '166, '357, and '6576 patents with knowledge that the same is especially made or adapted for use in practicing those claims, and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Intel denies these allegations by Future Link.

96. More specifically and by way of example, regarding the '0576 patent, Intel has sold the Intel Xeon E5-4600, Xeon E5-2400, Xeon X5690, Intel Core i3, Xeon 750 series, Xeon Quad Core, and Xeon X5570 processors, as well as the Intel 5520 chipsets, which, according to Future Link's allegations against Dell, HP, and/or Promise, incorporate the allegedly infringing Intel OPI technology. With respect to the apparatus and/or system claims of the '0576 patent, Future Link's assertions target the QPI technologies on Intel's processor, chipset, and motherboard products as infringing. With respect to the method claims of the '0576 patent, the Intel processor, chipset, and motherboard products, in use and operation, provide the allegedly infringing QPI technologies, which are the target of Future Link's assertions. Intel provides and makes available product literature and instructions regarding these processors and chipsets, describing the allegedly infringing QPI functionality with Intel's knowledge and intent that such Intel products will be incorporated into end-devices like those sold by its customers Dell, HP, and Promise, and that such customers will use the functionality enabled by Intel's products, which functionality Future Link has alleged infringes the '0576 patent. Based on Future Link's allegations with respect to the '0576 patent broadly claiming that any product that incorporates Intel OPI technology infringes no matter how it is used. Future Link contends that Intel products such as its Xeon E5-4600, Xeon E5-2400, Xeon X5690, Intel Core i3, Xeon 7500 series, Xeon Quad Core, and Xeon X5570 processors, as well as 5520 chipsets, when incorporated and used

in end-devices by Dell, HP, Promise, and other customers, constitute at least a material component of an apparatus for use in practicing the claims of the '0576 patent with knowledge that the same is especially made or adapted for use in practicing those claims, and are not staple articles or commodities of commerce suitable for substantial non-infringing use.

97. More specifically and by way of example, regarding the '302 patent, Intel has sold the Intel Core i3, Core i5, Core i7, Xeon E5-2400, Xeon X7460, and Xeon X5570 processors which, according to Future Link's allegations against Dell incorporate the allegedly infringing multiple thermal sensor technology into a CPU. With respect to the apparatus and/or system claims of the '302 patent, Future Link's assertions target multiple thermal-sensor technologies on Intel's processors as allegedly infringing. With respect to the method claims of the '302 patent, the Intel processor products, in use and operation, provide the allegedly infringing multiple thermal-sensor technologies, which are the target of Future Link's assertions. Intel provides and makes available product literature and instructions regarding these processors, describing the allegedly infringing multiple thermal-sensor technology with Intel's knowledge and intent that such products will be incorporated into end-devices like those sold by its customers Dell, HP, and Promise, and that such customers will use the functionality enabled by Intel's products, which functionality Future Link has alleged infringes the '302 patent. Based on Future Link's allegations with respect to the '302 patent broadly claiming that any product that incorporates the allegedly infringing multiple thermal-sensor technology into a processor core infringes no matter how it is used, Future Link contends that Intel products such as its Core i3, Core i5, Core i7, Xeon E5-2400, Xeon X7460, and Xeon X5570 processors, when incorporated and used in end-devices by Dell, HP, Promise, and other customers, constitute at least a material component of an apparatus for use in practicing the claims of the '302 patent with knowledge

that the same is especially made or adapted for use in practicing those claims, and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Intel denies these allegations by Future Link.

98. More specifically and by way of example, regarding the '823 patent, Intel has sold Intel's 2nd and 4th Generation Celeron Dual Core processors, Core i3 processors, and Core i5-3210M processors, which, according to Future Link's allegations against Dell and/or HP, incorporate write-combining functionality. With respect to the apparatus and/or system claims of the '823 patent, Future Link's assertions target the write-combining technologies on Intel's processor products as infringing. With respect to the method claims of the '823 patent, the Intel processor products, in use and operation, provide the allegedly infringing write-combining technologies, which are the target of Future Link's assertions. Intel provides and makes available product literature and instructions regarding these processors, describing the allegedly infringing write-combining functionality with Intel's knowledge and intent that such products will be incorporated into end-devices like those sold by its customers Dell, HP, and Promise, and that such customers will use the functionality enabled by Intel's products, which functionality Future Link has alleged infringes the '823 patent. Based on Future Link's allegations with respect to the '823 patent broadly claiming that any product that incorporates a processor that performs the allegedly infringing write-combining technology infringes no matter how it is used, Future Link contends that Intel products such as its 2nd and 4th Generation Celeron Dual Core processors, Core i3 processors, and Core i5-3210M processors, when incorporated and used in end-devices by Dell, HP, Promise, and other customers, constitute at least a material component of an apparatus for use in practicing the claims of the '823 patent with knowledge that the same is especially made or adapted for use in practicing those claims, and are not staple articles or

commodities of commerce suitable for substantial non-infringing use. Intel denies these allegations by Future Link.

99. More specifically and by way of example, regarding the '108 patent, Intel has sold Intel's MCH architecture chipsets and Core i3, Core i5, Core i7, Xeon E5, Xeon X5570, Core i3-2348M, i5-3317U, E3-1290, Xeon Quad Core, and Pentium G840 processors which, according to Future Link's allegations against Dell, HP, and/or Promise use and/or interface with DDR3 SDRAM and DDR3 SDRAM memory modules. With respect to the apparatus and/or system claims of the '108 patent, Future Link's assertions target the DDR3 SDRAM technologies on Intel's processor and chipset products as infringing. With respect to the method claims of the '108 patent, the Intel processor and chipset products, in use and operation, provide the allegedly infringing DDR3 SDRAM technologies, which are the target of Future Link's assertions. Intel provides and makes available product literature and instructions regarding these chipsets and processors, describing the allegedly infringing use of DDR3 SDRAM and DDR3 SDRAM memory module functionalities with Intel's knowledge and intent that such products will be incorporated into end-devices like those sold by its customers Dell, HP, and Promise, and that such customers will use the functionality enabled by Intel's products, which functionality Future Link has alleged infringes the '108 patent. Based on Future Link's allegations with respect to the '108 patent broadly claiming that any product that contains, uses, and/or incorporates DDR3 SDRAM and DDR3 SDRAM memory modules infringes no matter how it is used, Future Link contends that Intel products such as its MCH architecture chipsets and Core i3, Core i5, Core i7, Xeon E5, Xeon X5570, Core i3-2348M, i5-3317U, E3-1290, Xeon Quad Core, and Pentium G840 processors, when incorporated and used in end-devices by Dell, HP, Promise, and other customers, constitute at least a material component of an apparatus for use in practicing the claims of the '108 patent with knowledge that the same is especially made or adapted for use in practicing those claims, and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Intel denies these allegations by Future Link.

100. Intel's products have not infringed, and do not infringe, either directly or indirectly, any valid and enforceable claim of any of the Patents-in-Suit, either literally or under the doctrine of equivalents. Nor is Intel aware of any infringement of any of the Patents-in-Suit. Thus, a substantial controversy exists between the parties regarding the Patents-in-Suit, Intel products, and Intel's alleged liability for direct or indirect infringement based on Future Link's allegations of direct and indirect infringement by Intel's customers based on Intel components that is of sufficient immediacy and reality to warrant declaratory relief.

COUNT I DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 5,608,357

- 101. Intel repeats and realleges the allegations in paragraphs 1–100 as though fully set forth herein.
- 102. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '357 patent, either literally or under the doctrine of equivalents.
- 103. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '357 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets, processors, and PCI-Express peripherals supplied by Intel.
- 104. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

- 105. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '357 patent.
- 106. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '357 patent, and that its customers have not infringed and do not infringe the '357 patent based on their incorporation or use of chipsets, processors, and PCI-Express peripherals supplied by Intel.

COUNT II DECLARATION OF INVALIDITY OF U.S. PATENT NO. 5,608,357

- 107. Intel repeats and realleges the allegations in paragraphs 1–106 as though fully set forth herein.
- 108. The '357 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 109. For example, the '357 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent No. 5,757,872, discloses the limitations of the claims of the '357 patent as asserted by Future Link. U.S. Patent No. 5,757,872 was known in the art by at least November 30, 1994.
- 110. As another example, the '357 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '357 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as U.S. Patent No. 5,757,872, either alone or in combination with other prior art.
- 111. The '357 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.

- 112. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 113. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '357 patent.

<u>COUNT III</u> DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 5,870,570

- 114. Intel repeats and realleges the allegations in paragraphs 1–113 as though fully set forth herein.
- 115. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '570 patent, either literally or under the doctrine of equivalents.
- 116. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '570 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets supplied by Intel.
- 117. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 118. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '570 patent.
- 119. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '570 patent, and that its customers have not infringed and do not infringe the '570 patent based on their incorporation or use of chipsets supplied by Intel.

COUNT IV DECLARATION OF INVALIDITY OF U.S. PATENT NO. 5,870,570

- 120. Intel repeats and realleges the allegations in paragraphs 1–119 as though fully set forth herein.
- 121. The '570 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 122. For example, the '570 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as the Intel i960 RP processor, practices and/or discloses the limitations of the claims of the '570 patent as asserted by Future Link. The Intel i960 RP processor was known in the art by at least July 1996.
- 123. As another example, the '570 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '570 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as the Intel i960 RP processor, either alone or in combination with other prior art.
- 124. The '570 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 125. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 126. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '570 patent.

COUNT V DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 6,008,823

127. Intel repeats and realleges the allegations in paragraphs 1–126 as though fully set forth herein.

- 128. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '823 patent, either literally or under the doctrine of equivalents.
- 129. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '823 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of processors supplied by Intel.
- 130. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 131. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '823 patent.
- 132. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '823 patent, and that its customers have not infringed and do not infringe the '823 patent based on their incorporation or use of processors supplied by Intel.

COUNT VI DECLARATION OF INVALIDITY OF U.S. PATENT NO. 6,008,823

- 133. Intel repeats and realleges the allegations in paragraphs 1–132 as though fully set forth herein.
- 134. The '823 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 135. For example, the '823 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent No. 5,630,075, discloses the limitations of the claims of the '823 patent as asserted by Future Link. U.S. Patent No. 5,630,075 was known in the art by at least May 25, 1995.

- 136. As another example, the '823 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '823 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as U.S. Patent No. 5,630,075, either alone or in combination with other prior art.
- 137. The '823 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 138. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 139. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '823 patent.

COUNT VII DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 6,108,738

- 140. Intel repeats and realleges the allegations in paragraphs 1–139 as though fully set forth herein.
- 141. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '738 patent, either literally or under the doctrine of equivalents.
- 142. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '738 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets supplied by Intel.
- 143. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

- 144. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '738 patent.
- 145. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '738 patent, and that its customers have not infringed and do not infringe the '738 patent based on their incorporation or use of chipsets supplied by Intel.

COUNT VIII DECLARATION OF INVALIDITY OF U.S. PATENT NO. 6,108,738

- 146. Intel repeats and realleges the allegations in paragraphs 1–145 as though fully set forth herein.
- 147. The '738 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 148. For example, the '738 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as the Intel i960 RP processor, practices and/or discloses the limitations of the claims of the '738 patent as asserted by Future Link. The Intel i960 RP processor was known in the art by at least July 1996.
- 149. As another example, the '738 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '738 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as the Intel i960 RP processor, either alone or in combination with other prior art.
- 150. The '738 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 151. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

152. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '738 patent.

<u>COUNT IX</u> DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 6,606,576

- 153. Intel repeats and realleges the allegations in paragraphs 1–152 as though fully set forth herein.
- 154. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '6576 patent, either literally or under the doctrine of equivalents.
- 155. Intel's customers have not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '6576 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets, processors, and PCI-Express peripherals supplied by Intel.
- 156. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 157. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '6576 patent.
- 158. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '6576 patent, and that its customers have not infringed and do not infringe the '6576 patent based on their incorporation or use of chipsets, processors, and PCI-Express peripherals supplied by Intel.

COUNT X DECLARATION OF INVALIDITY OF U.S. PATENT NO. 6,606,576

159. Intel repeats and realleges the allegations in paragraphs 1–158 as though fully set forth herein.

- 160. The '6576 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 161. For example, the '6576 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent No. 6,336,192, discloses the limitations of the claims of the '6576 patent as asserted by Future Link. U.S. Patent No. 6,336,192 was known in the art by at least February 12, 1999.
- 162. As another example, the '6576 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '6576 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as U.S. Patent No. 6,336,192, either alone or in combination with other prior art.
- 163. The '6576 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 164. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 165. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '6576 patent.

COUNT XI DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 6,622,108

- 166. Intel repeats and realleges the allegations in paragraphs 1–165 as though fully set forth herein.
- 167. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '108 patent, either literally or under the doctrine of equivalents.

- 168. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '108 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets and processors supplied by Intel.
- 169. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 170. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '108 patent.
- 171. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '108 patent, and that its customers have not infringed and do not infringe the '108 patent based on their incorporation or use of chipsets and processors supplied by Intel.

COUNT XII DECLARATION OF INVALIDITY OF U.S. PATENT NO. 6,622,108

- 172. Intel repeats and realleges the allegations in paragraphs 1–171 as though fully set forth herein.
- 173. The '108 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102,103, and 112.
- 174. For example, the '108 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent Nos. 5,717,701, 5,940,783 and 5,819,025, discloses the limitations of the claims of the '108 patent as asserted by Future Link. U.S. Patent Nos. 5,717,701, 5,940,783 and 5,819,025 were known in the art by at least 1998.
- 175. As another example, the '108 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '108 patent as asserted by Future Link would have been obvious to one

of ordinary skill in the art in view of the prior art, such as U.S. Patent Nos. 5,717,701, 5,940,783 and 5,819,025, either alone or in combination with other prior art.

- 176. The '108 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 177. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 178. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '108 patent.

<u>COUNT XIII</u> DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 6,636,166

- 179. Intel repeats and realleges the allegations in paragraphs 1–178 as though fully set forth herein.
- 180. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '166 patent, either literally or under the doctrine of equivalents.
- 181. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '166 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets, processors, and PCI-Express peripherals supplied by Intel.
- 182. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 183. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '166 patent.

184. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '166 patent, and that its customers have not infringed and do not infringe the '166 patent based on their incorporation or use of chipsets, processors, and PCI-Express peripherals supplied by Intel.

<u>COUNT XIV</u> DECLARATION OF INVALIDITY OF U.S. PATENT NO. 6,636,166

- 185. Intel repeats and realleges the allegations in paragraphs 1–184 as though fully set forth herein.
- 186. The '166 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 187. For example, the '166 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent No. 4,486,739, discloses the limitations of the claims of the '166 patent as asserted by Future Link. U.S. Patent No. 4,486,739 was known in the art by at least December 4, 1984.
- 188. As another example, the '166 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '166 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as U.S. Patent No. 4,486,739, either alone or in combination with other prior art.
- 189. The '166 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 190. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

191. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '166 patent.

COUNT XV DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 6,920,576

- 192. Intel repeats and realleges the allegations in paragraphs 1–191 as though fully set forth herein.
- 193. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '0576 patent, either literally or under the doctrine of equivalents.
- 194. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '0576 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of chipsets, processors, and motherboards supplied by Intel.
- 195. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 196. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '0576 patent.
- 197. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '0576 patent, and that its customers have not infringed and do not infringe the '0576 patent based on their incorporation or use of chipsets, processors, and motherboards supplied by Intel.

<u>COUNT XVI</u> DECLARATION OF INVALIDITY OF U.S. PATENT NO. 6,920,576

198. Intel repeats and realleges the allegations in paragraphs 1–197 as though fully set forth herein.

- 199. The '0576 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 200. For example, the '0576 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent No. 5,872,959, discloses the limitations of the claims of the '0576 patent as asserted by Future Link. U.S. Patent No. 5,872,959 was known in the art by at least February 16, 1999.
- 201. As another example, the '0576 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '0576 patent as asserted by Future Link would have been obvious to one of ordinary skill in the art in view of the prior art, such as U.S. Patent No. 5,872,959, either alone or in combination with other prior art.
- 202. The '0576 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 203. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 204. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '0576 patent.

<u>COUNT XVII</u> DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 7,478,302

- 205. Intel repeats and realleges the allegations in paragraphs 1–204 as though fully set forth herein.
- 206. Intel has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '302 patent, either literally or under the doctrine of equivalents.

- 207. Intel's customers have not infringed and do not infringe, directly or indirectly, any valid and enforceable claim of the '302 patent, either literally or under the doctrine of equivalents, based on their incorporation or use of processors supplied by Intel.
- 208. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 209. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '302 patent.
- 210. Intel is entitled to a judicial declaration that it has not infringed and does not infringe the '302 patent, and that its customers have not infringed and do not infringe the '302 patent based on their incorporation or use of processors supplied by Intel.

COUNT XVIII DECLARATION OF INVALIDITY OF U.S. PATENT NO. 7,478,302

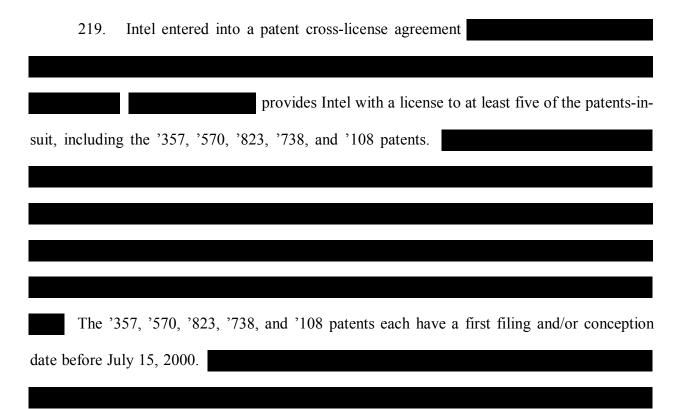
- 211. Intel repeats and realleges the allegations in paragraphs 1–210 as though fully set forth herein.
- 212. The '302 patent is invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 102, 103, and 112.
- 213. For example, the '302 patent is invalid as anticipated under 35 U.S.C. § 102 because the prior art, such as U.S. Patent No. 6,908,227, discloses the limitations of the claims of the '302 patent as asserted by Future Link. U.S. Patent No. 6,908,227 was known in the art by at least August 23, 2002.
- 214. As another example, the '302 patent is invalid as obvious under 35 U.S.C. § 103 because the claims of the '302 patent as asserted by Future Link would have been obvious to one

of ordinary skill in the art in view of the prior art, such as U.S. Patent No. 6,908,227, either alone or in combination with other prior art.

- 215. The '302 patent is invalid under 35 U.S.C. § 112 because the specification does not contain sufficient written description support for the claims as asserted by Future Link.
- 216. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 217. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights regarding the '302 patent.

COUNT XIX LICENSE

218. Intel repeats and realleges the allegations in paragraphs 1–217 as though fully set forth herein.



VLSI Technology, Inc. filed the applications leading to the '357, '570, '823, and '738 patents between August 1995 and January 1999, and was subsequently acquired by Philips in approximately June of 1999. The '108 patent was filed by Koninklijke Philips Electronics N.V., and claims priority to a February 22, 1998 European patent.

Intel and the products at issue in this case meet all other material terms required by

- 220. Future Link's infringement assertions and license demands are based at least in part on, and on their face encompass, the alleged making, use, sale, offer for sale, or importation of licensed Intel products. Future Link's infringement assertions and license demands are barred at least in part by
- 221. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 222. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights with respect to the Patents-in-Suit.
- 223. Intel is entitled to a judicial declaration that it is licensed with respect to at least the '357, '570, '823, '738, and '108 patents.

COUNT XX EXHAUSTION

- 224. Intel repeats and realleges the allegations in paragraphs 1–223 as though fully set forth herein.
- 225. As set forth above. Future Link's infringement assertions and license demands are based at least in part on, and on their face encompass, the alleged making, use, sale, offer for sale, or importation of Intel products. Such assertions and license demands are barred at least in

part by the doctrine of patent exhaustion by virtue of the allegations in paragraphs 218-223 above.

- 226. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 227. A judicial declaration is necessary and appropriate so that Intel may ascertain its rights with respect to the Patents-in-Suit.
- 228. Intel is entitled to a judicial declaration that Future Link's infringement assertions are barred by the doctrine of patent exhaustion with respect to at least the '357, '570, '823, '738, and '108 patents.

JURY DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Intel hereby demands a trial by jury on all issues and claims so triable.

PRAYER FOR RELIEF

WHEREFORE, plaintiff Intel respectfully requests that judgment be entered in its favor and prays that the Court grant the following relief:

- A. A declaration that Intel has not infringed, either directly or indirectly, any valid and enforceable claim of the Patents-in-Suit, either literally or under the doctrine of equivalents;
- B. A declaration that Intel's customers have not infringed, either directly or indirectly, any valid and enforceable claim of the Patents-in-Suit, either literally or under the doctrine of equivalents, based on their alleged incorporation or use of chipsets, processors, motherboards, or PCI-Express peripherals provided by Intel, including those identified in Exhibit 1;

- C. A declaration that the Patents-in-Suit are invalid:
- D. A declaration that Intel is licensed and/or Future Link's rights are exhausted;
- E. An order enjoining Future Link and its officers, agents, servants, employees, attorneys, and those in active concert or participation with them from asserting infringement or instituting or continuing any action for infringement of the Patents-in-Suit against Intel or the suppliers, manufacturers, distributors, resellers, customers, or end users of its products;
- F. An order declaring that this is an exceptional case, and awarding Intel its costs and reasonable attorney fees under 35 U.S.C. § 285; and
 - G. Such other and further relief as this Court may deem just and proper.

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