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11 Attorneys for Plaintiff
NAZOMI COMMUNICATIONS, INC.

13 **UNITED STATES DISTRICT COURT**
14 **NORTHERN DISTRICT OF CALIFORNIA**
15 **SAN JOSE DIVISION**

16 Nazomi Communications, Inc.,

17 Plaintiff,

18 v.

19 Samsung Telecommunications America, LLC,
20 Samsung Electronics Co., Ltd., Samsung
Electronics America, Inc., HTC Corp., HTC
21 America, Inc., LG Electronics, Inc., LG
Electronics Mobilecomm U.S.A., Inc.,
22 Kyocera Communications Inc., ARM Ltd.
ARM, Inc., Amazon.com, Inc., and Vizio, Inc.

23 Defendants.

Case No. 5:10-cv-5545-RMW

**SECOND AMENDED COMPLAINT FOR
PATENT INFRINGEMENT**

JURY TRIAL DEMANDED

24
25 Plaintiff Nazomi Communications, Inc. ("Nazomi"), by and through its undersigned
26 counsel, complains as follows:
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JURISDICTION AND VENUE

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2 1. This infringement action arises under the patent laws of the United States, Title 35
3 of the United States Code, including but not limited to 35 U.S.C. § 271.

4 2. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and
5 1338(a).

6 3. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), 1391(c),
7 and 1400(b).

8
9 **THE PARTIES**

10 4. Plaintiff Nazomi Communications, Inc. is a corporation organized and existing
11 under the laws of the State of Delaware with its principal place of business at 3561 Homestead
12 Road, Suite 571, Santa Clara, California 95051.

13 5. LG Electronics, Inc. is a foreign corporation organized and existing under the laws
14 of Korea, with its principal place of business at LG Twin Towers 20, Yeouido-dong,
15 Yeongdeungpo-gu, Seoul 150-721, South Korea. On information and belief, Defendant LG
16 Electronics Mobilecomm U.S.A., Inc. is a corporation organized and existing under the laws of
17 the State of California, with its principal place of business located at 10101 Old Grove Rd, San
18 Diego, CA 92131. LG Electronics, Inc. and LG Electronics Mobilecomm U.S.A., Inc. are
19 referred to collectively herein as "LG."

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21 6. Defendant Samsung Electronics Co., Ltd. is a foreign corporation organized and
22 existing under the laws of Korea, with corporate offices located at Samsung Electronics Building
23 1320-10, Seocho 2-dong, Seocho-gu, Seoul 137-B57, Korea. Defendant Samsung Electronics
24 America, Inc. is a corporation organized and existing under the laws of the State of New York,
25 with its principal place of business located at 105 Challenger Road, Ridgefield Park, NJ 07660.
26 Samsung Telecommunications America, LLC is a corporation organized and existing under the
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1 laws of the State of Delaware, with its principal place of business located at 1301 Lookout Dr.,
2 Richardson, TX 75082. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. and
3 Samsung Telecommunications America, LLC are referred to collectively herein as "Samsung."

4 7. HTC Corp. is a foreign corporation organized and existing under the laws of
5 Taiwan, with its principal place of business at 23 Hsin Hua Rd., Taoyuan, 330, Taiwan.
6 Defendant HTC America, Inc. is a corporation organized and existing under the laws of the State
7 of Washington having its principle place of business at 13920 S.E. Eastgate Way, Suite 400,
8 Bellevue, WA 98005. HTC Corp. and HTC America, Inc. are referred to collectively herein as
9 "HTC."
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11 8. Defendant Kyocera Communications, Inc. ("Kyocera") is a corporation organized
12 and existing under the laws of the State of Delaware, with its principal place of business located
13 at 9520 Towne Centre Drive, San Diego, California, 92121.
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15 9. Defendants ARM Ltd. and ARM, Inc. (collectively "ARM") are subsidiaries of
16 ARM Holdings PLC. ARM Ltd. is a corporation organized and existing under the laws of
17 England and Wales having corporate offices in Cambridge, England. ARM Inc. is a California
18 corporation with its principal place of business located at 150 Rose Orchard Way, San Jose,
19 California 95134-1358.
20

21 10. Defendant Vizio, Inc. ("Vizio") is a corporation organized and existing under the
22 laws of the State of California with its principal place of business at 39 Tesla, Irvine, CA 92618.

23 11. Defendant Amazon.com, Inc. ("Amazon") is a corporation organized and existing
24 under the laws of the State of Delaware with its principal place of business at 410 Terry Avenue
25 N., Seattle, Washington 98109.
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BACKGROUND

12. Nazomi Communications, Inc. was founded in September 1998 by three Java technology and embedded systems veterans for the purpose of enhancing the performance of applications that run on the Java platform and other universal runtime platforms. Nazomi's pioneering technologies included the JSTAR Java Coprocessor technology and the JA108 Java and Multimedia Application Processor, which were targeted at wireless mobile devices, internet appliances, and embedded systems. Nazomi's technology and products were adopted by leading phone manufacturers and incorporated into millions of smart phones. In the years since Nazomi's introduction of the JSTAR and JA108 products, Java hardware and software acceleration has been widely adopted for wireless mobile and embedded systems applications. Java is now used as a platform on hundreds of millions of devices.

13. On July 18, 2006, the United States Patent and Trademark Office duly and legally issued United States Patent No. 7,080,362 entitled "Java Virtual Machine Hardware for RISC and CISC Processors" ("the '362 patent"). A true and correct copy of the '362 patent is attached as Exhibit A.

14. On May 29, 2007, the United States Patent and Trademark Office duly and legally issued United States Patent No. 7,225,436 entitled "Java Hardware Accelerator Using Microcode Engine" ("the '436 patent"). A true and correct copy of the '436 patent is attached as Exhibit B.

15. On January 8, 2002, the United States Patent and Trademark Office duly and legally issued United States Patent No. 6,338,160 entitled "Constant Pool Reference Resolution Method" ("the '160 patent"). A true and correct copy of the '160 patent is attached as Exhibit C.

16. Nazomi is the owner and possessor of all rights, title, and interest in the '362, '436, and '160 patents.

17. Defendant Samsung makes, uses, sells, and/or offers for sale within the United

1 States and this judicial district consumer electronic devices containing processor cores capable of
2 Java hardware acceleration including, but not limited to, the Instinct s30 (SPH-M810) mobile
3 phone. Upon information and belief, the Instinct s30 (SPH-M810) mobile phone incorporates an
4 ARM926EJ-S processor core capable of Java hardware acceleration.

5
6 18. Defendant Samsung likewise makes, uses, sells, and/or offers for sale within the
7 United States and this judicial district consumer electronic devices that use a virtual machine
8 (“VM”) to resolve constant pool references including, but not limited to, the Captivate (SGH-
9 I897) mobile phone. Upon information and belief, the Captivate (SGH-I897) mobile phone uses
10 a VM to resolve constant pool references.

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12 19. Defendant HTC makes, uses, sells, and/or offers for sale within the United States
13 and this judicial district consumer electronic devices containing processor cores capable of Java
14 hardware acceleration including, but not limited to, the HTC Freestyle. Upon information and
15 belief, the HTC Freestyle mobile phone incorporates an ARM1136EJ-S processor core capable of
16 Java hardware acceleration.

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18 20. Defendant HTC makes, uses, sells, and/or offers for sale within the United States
19 and this judicial district consumer electronic devices that use a VM to resolve constant pool
20 references including, but not limited to, the Droid Incredible mobile phone. Upon information
21 and belief, the Droid Incredible mobile phone uses a VM to resolve constant pool references.

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23 21. Defendant LG makes, uses, sells, and/or offers for sale within the United States
24 and this judicial district consumer electronic devices containing processor cores capable of Java
25 hardware acceleration including, but not limited to, the LX370 mobile phone. Upon information
26 and belief, the LX370 mobile phone incorporates an ARM926EJ-S processor core capable of Java
27 hardware acceleration.

28 22. Defendant LG likewise makes, uses, sells, and/or offers for sale within the United

1 States and this judicial district consumer electronic devices that use a VM to resolve constant pool
2 references including, but not limited to, the Ally (VS740) mobile phone. Upon information and
3 belief, the Ally (VS740) mobile phone uses a VM to resolve constant pool references.

4 23. Defendant Kyocera makes, uses, sells, and/or offers for sale within the United
5 States and this judicial district consumer electronic devices containing processor cores capable of
6 Java hardware acceleration including, but not limited to, the PRO-700 mobile phone. Upon
7 information and belief, the PRO-700 mobile phone incorporates an ARM926EJ-S processor core
8 capable of Java hardware acceleration.
9

10 24. Defendant Kyocera likewise makes, uses, sells, and/or offers for sale within the
11 United States and this judicial district consumer electronic devices that use a VM to resolve
12 constant pool references including, but not limited to, the Zio (M6000) mobile phone. Upon
13 information and belief, the Zio (M6000) mobile phone uses a VM to resolve constant pool
14 references.
15

16 25. Defendant ARM makes, uses, sells, and/or offers for sale within the United States
17 and this judicial district processor cores and/or semiconductor intellectual property that include
18 ARM's Jazelle extension capable of Java hardware acceleration including, but not limited to, the
19 ARM926EJ-S, ARM1136J-S, and the ARM Cortex A9.
20

21 26. Defendant VIZIO, Inc. makes, uses, sells, and/or offers for sale within the United
22 States and this judicial district the VTAB1008 tablet computer. Upon information and belief, the
23 VTAB1008 tablet computer uses a VM to resolve constant pool references.

24 27. Defendant Amazon.com, Inc. makes, uses, sells, and/or offers for sale within the
25 United States and this judicial district the Kindle Fire tablet computer. Upon information and
26 belief, the Kindle Fire tablet computer uses a virtual machine ("VM") to resolve constant pool
27 references.
28

COUNT I
INFRINGEMENT OF THE '362 PATENT

28. Plaintiff incorporates each of the preceding paragraphs 1-27 as if fully set forth herein.

29. Defendants Samsung, LG, HTC, Kyocera and ARM have been and are directly infringing the '362 patent by making, using, selling, and/or offering for sale within the United States and this judicial district the products identified in paragraphs 17, 19, 21, 23, and 25.

30. Upon information and belief, since at least December 7, 2009, ARM has been and is indirectly infringing one or more claims of the '362 patent by providing technology and documentation that contributes to and induces direct infringement of one or more claims of the '362 patent by manufacturers and users of consumer electronics devices equipped with an ARM core having ARM's Jazelle extension.

31. Upon information and belief, ARM has had actual knowledge of the '362 patent since at least December 7, 2009, when Nazomi initiated suit against the Nazomi I defendants in the United States District Court for the Eastern District of Texas.

32. Upon information and belief, since at least December 7, 2009, ARM has offered to sell and has sold processor core technology having ARM's Jazelle extension, including the ARM products identified in paragraph 25, for incorporation by consumer electronics manufacturers into a wide variety of consumer electronic devices.

33. Upon information and belief, since at least December 7, 2009, ARM has offered and has sold its processor core products having the Jazelle extension knowing that the Jazelle feature is especially made and adapted for use in direct infringement of one or more claims of the '362 patent by consumer electronics manufacturers that make, use, offer, import, and/or sell electronic devices equipped with an ARM core having the Jazelle extension and/or by end users

1 of such devices via installation or execution of bytecode-based programs.

2 34. Upon information and belief, the Jazelle feature of ARM's processor core
3 technology is not a staple article or commodity of commerce suitable for substantial use in a
4 manner that does not infringe one or more claims of the '362 patent.

5 35. Upon information and belief, since at least December 7, 2009, ARM also has
6 provided consumer electronics manufacturers, including Samsung, LG, HTC, and Kyocera, with
7 technical documentation and other support to enable such companies to incorporate ARM
8 processor cores equipped with ARM's Jazelle feature into consumer electronic devices. For
9 example, ARM has provided and continues to provide consumer electronics manufacturers with
10 Technical Reference Manuals and other documentation for its ARM1136 processors. Upon
11 information and belief, that documentation includes instructions for implementing Jazelle direct
12 bytecode execution (DBX), which allows for hardware acceleration of bytecodes.
13

14 36. Upon information and belief, since at least December 7, 2009, ARM has provided
15 technical documentation and other support to consumer electronics manufacturers with the
16 specific intent to induce direct infringement of one or more claims of the '362 patent by
17 manufacturers of devices equipped with an ARM core having the Jazelle feature and/or by end
18 users of such devices via installation or execution of bytecode-based programs.
19

20 37. The infringement by Defendants Samsung, LG, HTC, Kyocera, and ARM of the
21 '362 patent has injured Plaintiff and will cause irreparable injury and damage in the future unless
22 Defendants are enjoined from infringing the '362 patent.
23

24 **COUNT II**
25 **INFRINGEMENT OF THE '436 PATENT**

26 38. Plaintiff incorporates each of the preceding paragraphs 1-27 as if fully set forth
27 herein.

28 39. Defendants Samsung, LG, HTC, Kyocera, and ARM have been and are directly

1 infringing the '436 patent by making, using, selling, and/or offering for sale within the United
2 States and this judicial district the products identified in paragraphs 17, 19, 21, 23, and 25.

3 40. Upon information and belief, since at least December 7, 2009, ARM has been and
4 is indirectly infringing one or more claims of the '436 patent by providing technology and
5 documentation that contributes to and induces direct infringement of one or more claims of the
6 '436 patent by manufacturers and users of consumer electronics devices equipped with an ARM
7 core having ARM's Jazelle extension.
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9 41. Upon information and belief, ARM has had actual knowledge of the '436 patent
10 since at least December 7, 2009, when Nazomi initiated suit against the Nazomi I defendants in
11 the United States District Court for the Eastern District of Texas.
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13 42. Upon information and belief, since at least December 7, 2009, ARM has offered to
14 sell and has sold processor core technology having ARM's Jazelle extension, including the ARM
15 products identified in paragraph 25, for incorporation by consumer electronics manufacturers into
16 a wide variety of consumer electronic devices.

17 43. Upon information and belief, since at least December 7, 2009, ARM has offered
18 and has sold processor core products having the Jazelle extension knowing that the Jazelle feature
19 is especially made and adapted for use in direct infringement of one or more claims of the '436
20 patent by consumer electronics manufacturers that make, use, offer, import, and/or sell electronic
21 devices equipped with an ARM core having the Jazelle extension and/or by end users of such
22 devices via installation or execution of bytecode-based programs.
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24 44. Upon information and belief, the Jazelle feature of ARM's processor core
25 technology is not a staple article or commodity of commerce suitable for substantial use in a
26 manner that does not infringe one or more claims of the '436 patent.
27

28 45. Upon information and belief, since at least December 7, 2009, ARM also has

1 provided consumer electronics manufacturers, including Samsung, LG, HTC, and Kyocera, with
 2 technical documentation and other support to enable such companies to incorporate ARM
 3 processor cores equipped with ARM's Jazelle feature into consumer electronic devices. For
 4 example, ARM has provided and continues to provide consumer electronics manufacturers with
 5 Technical Reference Manuals and other documentation for its ARM1136 processors. Upon
 6 information and belief, that documentation includes instructions for implementing Jazelle direct
 7 bytecode execution (DBX), which allows for hardware acceleration of bytecodes.

9 46. Upon information and belief, since at least December 7, 2009, ARM has provided
 10 technical documentation and other support to consumer electronics manufacturers with the
 11 specific intent to induce direct infringement of one or more claims of the '436 patent by
 12 manufacturers of devices equipped with an ARM core having the Jazelle feature and/or by end
 13 users of such devices via installation or execution of bytecode-based programs.

14 47. The infringement by Defendants Samsung, LG, HTC, Kyocera, and ARM of the
 15 '436 patent has injured Plaintiff and will cause irreparable injury and damage in the future unless
 16 Defendants are enjoined from infringing the '436 patent.

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 18 **COUNT III**
 19 **INFRINGEMENT OF THE '160 PATENT**

20 48. Plaintiff incorporates each of the preceding paragraphs 1-27 as if fully set forth
 21 herein.

22 49. Defendants Samsung, HTC, LG, Kyocera, Amazon, and Vizio have been and are
 23 directly infringing the '160 patent by making, using, selling, and/or offering for sale within the
 24 United States and this judicial district the products identified in paragraphs 18, 20, 22, 24, 26, and
 25 27.

26 50. The infringement by Defendants Samsung, LG, HTC, Kyocera, Amazon, and
 27 Vizio of the '160 patent has injured Plaintiff and will cause irreparable injury and damage in the
 28

1 future unless Defendants are enjoined from infringing the '160 patent.

2 **PRAYER FOR RELIEF**

3 WHEREFORE, Nazomi prays for judgment against all Defendants as follows:

4 a) That the Court find that Defendants Samsung, LG, HTC, Kyocera, and ARM have
5 each infringed, and are each presently infringing, United States Patent Nos. 7,080,362 and
6 7,225,436;

7 b) That the Court find that Defendants Samsung, LG, HTC, Kyocera, Amazon, and
8 Vizio have each infringed, and are each presently infringing, United States Patent No. 6,338,160;

9 c) That the Court find the '362, '436, '160 patents valid and enforceable;

10 d) That the Court award Nazomi damages or other monetary relief, including
11 prejudgment interest, for Defendants' infringement;

12 e) That the Court find this to be an exceptional case entitling Nazomi to an award of
13 attorney's fees, expenses, and costs pursuant to 35 U.S.C. § 285;

14 f) That the Court enjoin Defendants Samsung, LG, HTC, Kyocera, ARM, Amazon,
15 and Vizio and their officers, directors, agents, and employees, from infringing the '362, '436,
16 and/or '160 patents;

17 g) That the Court award Nazomi such other and further relief as the Court deems just
18 and appropriate.

19 **DEMAND FOR JURY TRIAL**

20 Plaintiff respectfully requests a jury trial on all issues so triable.
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2 Dated: January /6, 2012

PEPPER HAMILTON LLP

3 Respectfully submitted,

4 

5 Matthew Durell

6 Attorney for Plaintiff
7 NAZOMI COMMUNICATIONS, INC.
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