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17 Attorneys for Plaintiffs
ADVANCED MICRO DEVICES, INC.
18 and ATI TECHNOLOGIES ULC

19 UNITED STATES DISTRICT COURT
20 NORTHERN DISTRICT OF CALIFORNIA
21 SAN JOSE DIVISION

22
23 (1) ADVANCED MICRO DEVICES, INC.,
24 a Delaware Corporation,
25 (2) ATI TECHNOLOGIES ULC,
a Canadian unlimited liability
26 company,

27 Plaintiffs,

28 v.

Case No. 5:14-cv-1012

COMPLAINT FOR PATENT
INFRINGEMENT

DEMAND FOR JURY TRIAL

1) LG ELECTRONICS, INC., a Korean entity,
(2) LG ELECTRONICS U.S.A., Inc., a Delaware entity,
(3) LG ELECTRONICS MOBILECOMM U.S.A., INC., a California entity,

Defendants.

Plaintiffs Advanced Micro Devices, Inc. and ATI Technologies ULC (collectively “Plaintiff” or “AMD”) for their complaint allege as follows:

INTRODUCTION

This is an action against LG Electronics, Inc. and its U.S. subsidiaries and related entities LG Electronics U.S.A., Inc., and LG Electronics MobileComm U.S.A., Inc., (individually or collectively “Defendants” or “LG Electronics”), for patent infringement under the Patent Laws of the United States, 35 U.S.C. § 1 et seq., for infringing the following AMD patents:

- (a) U.S. Patent No. 6,889,332 (“Helms ’332 patent”), entitled “*Variable Maximum Die Temperature Based on Performance State*,” owned by Advanced Micro Devices, Inc.;
- (b) U.S. Patent No. 6,895,520 (“Altmejd ’520 patent”), entitled “*Performance and Power Optimization via Block Oriented Performance Measurement and Control*,” owned by Advanced Micro Devices, Inc.;
- (c) U.S. Patent No. 6,897,871 (“Morein ’871 patent”), entitled “*Graphics Processing Architecture Employing a Unified Shader*,” owned by Advanced Micro Devices, Inc.’s subsidiary, ATI Technologies ULC;
- (d) U.S. Patent No. 7,327,369 (“Morein ’369 patent”), entitled “*Graphics Processing Architecture Employing a Unified Shader*,” owned by Advanced Micro Devices, Inc.’s subsidiary, ATI Technologies ULC;

- 1 (e) U.S. Patent No. 7,742,053 (“Lefebvre ’053 patent”), entitled “*Multi-Thread*
2 *Graphics Processing System*,” owned by Advanced Micro Devices, Inc.’s
3 subsidiary, ATI Technologies ULC;
- 4 (f) U.S. Patent No. 5,898,849 (“Tran ’849 patent”), entitled “*Microprocessor*
5 *Employing Local Caches for Functional Units to Store Memory Operands Used by*
6 *the Functional Units*,” owned by Advanced Micro Devices, Inc.;
- 7 (g) U.S. Patent No. 6,266,715 (“Loyer ’715 patent”), entitled “*Universal Serial*
8 *Bus Controller with a Direct Memory Access Mode*,” owned by Advanced
9 Micro Devices, Inc.;
- 10 (h) U.S. Patent No. 6,784,879 (“Orr ’879 patent”), entitled “*Method and*
11 *Apparatus for Providing Control of Background Video*,” owned by Advanced
12 Micro Devices, Inc.’s subsidiary, ATI Technologies ULC; and
- 13 (i) U.S. Patent No. 7,095,945 (“Kovacevic ’945 patent”), entitled “*System for*
14 *Digital Time Shifting and Method Thereof*,” owned by Advanced Micro
15 Devices, Inc.’s subsidiary, ATI Technologies ULC.

16 Collectively, the AMD patents generally cover technologies that provide critical
17 functionalities in consumer electronic devices, meet and exceed myriad performance
18 requirements while enabling attractive form factors demanded by users in mobile
19 devices, and deliver an improved user experience in a wide variety of consumer
20 products. Among other things, the AMD patents disclose technologies relating to
21 semiconductors with innovative logic or design, improved graphics and video
22 processing, ways to more effectively communicate across communications networks,
23 improved user interface functionalities and capabilities, and consumer products
24 incorporating or embodying the disclosed inventions.

25 THE PARTIES

26 1. Advanced Micro Devices, Inc. is a Delaware corporation with its principal
27 executive offices at One AMD Place, Sunnyvale, California 94085. Advanced Micro
28 Devices, Inc. is an innovative and pioneering technology company that designs

1 computer processors and related technologies for commercial and consumer markets.
2 Advanced Micro Devices, Inc. designs and integrates cutting-edge technology that
3 enables immersive graphics, high-definition video, and innovative features that power
4 millions of electronic devices.

5 2. ATI Technologies ULC is a subsidiary of Advanced Micro Devices, Inc.
6 and is incorporated in Alberta, Canada with its principal offices at 1 Commerce Valley
7 Drive E, Markham, Ontario, L3T 7X6, Canada. ATI Technologies ULC supports
8 Advanced Micro Devices Inc.'s design and development of cutting-edge technology that
9 enables immersive graphics, high-definition video, and innovative features that power
10 millions of electronic devices.

11 3. LG Electronics, Inc. ("LGI") is a Korean business entity with its principal
12 offices at LG Twin Towers 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, South Korea
13 150-721. On information and belief, LGI is a \$50 billion global leader in consumer
14 electronics, home appliances, and mobile communications, and is one of Asia's largest
15 electronics companies. On information and belief, LGI designs, manufactures, has
16 manufactured, uses, offers for sale, sells and/or imports into the United States a wide
17 variety of consumer electronics products, including numerous televisions, smartphones,
18 tablets, Blu-ray players, projectors, and smart appliances.

19 4. LG Electronics U.S.A., Inc. ("LGE") is a Delaware corporation with its
20 principal place of business located at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey
21 07632. On information and belief, LGE is a wholly-owned subsidiary of LGI. On
22 information and belief, LGE is the U.S. sales arm for LGI and manufactures, has
23 manufactured, uses, offers for sale, sells and/or imports into the United States a wide
24 range of consumer electronics products, including numerous televisions, smartphones,
25 tablets, Blu-ray players, projectors, and smart appliances, conducts primary market and
26 product research for LGI, and enables regional customers to influence the direction of
27 LGI's future technologies and products.
28

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