IN THE UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

TRUSTEES OF BOSTON UNIVERSITY,

Plaintiff,

vs.

Civil Action No. 1:13-cv-10659

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., SAMSUNG LED CO., LTD., SAMSUNG ELECTRO-MECHANICS CO., LTD., SAMSUNG ELECTRO-MECHANICS AMERICA, INC. and SAMSUNG LED AMERICA, INC.

Defendants.

SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT AND JURY DEMAND

Plaintiff Trustees of Boston University, by and through its undersigned attorneys, hereby pleads the following claims of patent infringement against Defendants Samsung Electronics Company, Limited; Samsung Electronics America, Incorporated; Samsung LED Company, Limited; Samsung Electro-Mechanics Company, Limited; Samsung Electro-Mechanics America, Incorporated; and Samsung LED America, Incorporated and alleges as follows:

PARTIES

1. Plaintiff Trustees of Boston University ("BU" or the "University") is a non-profit educational institution with its principal place of business at One Silber Way, Boston, Massachusetts 02215.

2. The University is one of the largest private universities in the United States, and one of the largest employers in Boston, with more than 10,000 faculty and staff and over 33,000 students. It conducts a diverse range of interdisciplinary, collaborative and innovative research projects across a broad spectrum of academic departments, programs, centers and institutes, including research in the field of electrical and computer engineering. BU has won five Nobel

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Prizes and has been awarded hundreds of United States Patents, including U.S. Patent No. 5,686,738 (the "738 patent") and U.S. Patent No. 6,953,703 (the "703 patent").

3. Defendant Samsung Electronics Company, Limited ("SEC") is a South Korean entity located at 1320-10, Seocho 2-Dong, Seocho-Gu, Seoul 137-857, South Korea.

4. Defendant Samsung Electronics America, Incorporated ("SEA") is a New York entity located at 85 Challenger Road, Ridgefield Park, New Jersey 07660. SEA's registered agent for service of process is CT Corporation System, 111 Eighth Avenue, New York, New York 10011.

5. Defendant Samsung LED Company, Limited ("SLED") is a South Korean entity located at 314, Maetan 3-Dong, Youngtong-Gu, Suwon, 443-743, South Korea.

6. Defendant Samsung Electro-Mechanics Company, Limited ("SEMC") is a South Korean entity located at 314, Maetan 3-Dong, Youngtong-Gu, Suwon, 443-743, South Korea.

7. Defendant Samsung Electro-Mechanics America, Inc ("SEMA") is a California entity located at 3333 Michelson Drive #500, Irvine, California 92612.

8. Defendant Samsung LED America, Incorporated ("SLED America") is a Georgia entity located at 6 Concourse Parkway NE #900, Atlanta, Georgia 30328.

9. Prior to the filing of the Original Complaint, Defendants met with the University and were put on notice of the University's research into the subject matter of the patents-in-suit. No later than October 2012 Defendants were provided claim charts detailing Defendants' infringement of at least the '738 patent. Any acts of infringement after October 2012 have been willful.

JURISDICTION AND VENUE

10. This is an action for patent infringement arising under the patent laws of the United States of America, Title 35 of the United States Code. This Court has subject matter jurisdiction over the matters pled herein under 28 U.S.C. §§ 1331 and 1338(a) in that this is a civil action arising out of the patent laws of the United States of America.

11. Defendants regularly and deliberately engaged in and/or continue to engage in activities that result in using, selling, offering for sale, and/or importing infringing products and products made by infringing processes in and/or into the Commonwealth of Massachusetts and this judicial district. These activities violate the University's United States patent rights under the '738 patent and the '703 patent as pled herein. This Court has personal jurisdiction over the Defendants because, among other things, Defendants conduct business in the Commonwealth of Massachusetts and in this judicial district, and thus enjoy the privileges and protections of Massachusetts law.

12. Venue is proper in the District of Massachusetts pursuant to 28 U.S.C. §§ 1391(b), (c) and (d) and 1400(b).

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 5,686,738

13. The '738 patent, titled "Highly Insulating Monocrystalline Gallium Nitride Thin Films," issued on November 11, 1997. A true and correct copy of the '738 patent is attached hereto as <u>Exhibit A</u>.

14. Theodore D. Moustakas, Ph.D., Professor of Electrical and Computer Engineering at BU, is the named inventor of the '738 patent. The University owns by assignment the entire right, title, and interest in and to the '738 patent, including the sole right to sue for past and present patent infringements thereof.

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15. The University is informed and believes, and thereon alleges, that Defendants' LED product bearing part number SPHWWTHDD805WHT0GD includes a gallium nitride thin film semiconductor device claimed by the '738 patent and thus infringes one or more claims of the '738 patent. The University is informed and believes, and further alleges, that additional products of Defendants also constitute and/or include the claimed gallium nitride thin film semiconductor device and also infringe one or more claims of the '738 patent, including but not limited to light emitting diodes ("LEDs") and products bearing LEDs such as the SAMSUNG GALAXY TAB 2, SAMSUNG display model T24B350ND, model code LT24B350ND/ZA, SAMSUNG display model S27A550H, model code LS27A550HS/ZA, SAMSUNG display model UN22D5003BF, type UN22D5003, Chrome Book 11.6" (303C12-A01), Series 5 laptop 15.6" (NP510R5E-A02UB), Series 5 Ultra Book 13.3" (NP540UC3-A03UB), Series 7 Chronos (NP700Z7C-S91UB), Laptop 17.3" SPHWHTHAD603S0R0MZ, and SPMWHT221MD5WAP0S0 (all products accused of infringement above are collectively referred to as "Accused Products").

16. The University is informed and believes, and thereon alleges, that the applicable requirements of 35 U.S.C. § 287 have been satisfied.

17. The University is informed and believes, and thereon alleges, that Defendants have infringed, and continue to infringe, one or more claims of the '738 patent, in violation of 35 U.S.C. § 271(a), by, among other things, making, using, offering to sell, selling and/or importing in and/or into the United States, without authority or license from the University, the Accused Products falling within the scope of one or more claims of the '738 patent.

18. Defendants' acts of infringement have caused and will continue to cause substantial and irreparable damage to the University.

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19. As a result of the infringement of the '738 patent by Defendants, the University has been damaged. The University is therefore entitled to such damages pursuant to 35 U.S.C. § 284 in an amount that presently cannot be pled but that will be determined at trial.

20. The University is informed and believes, and thereon alleges, that Defendants' infringement of the '738 patent has been willful, systematic, and deliberate, that Defendants undertook its acts of infringement despite an objectively high likelihood that its actions constituted infringement of a valid patent, that this is an exceptional case within the meaning of 35 U.S.C. § 285, and that the University is entitled to recover its reasonable attorneys' fees incurred in this case as well as enhanced damages.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 6,953,703

21. The '703 patent, titled "Method of Making a Semiconductor Device with Exposure of Sapphire Substrate to Activated Nitrogen," issued on October 11, 2005. A true and correct copy of the '703 patent is attached hereto as <u>Exhibit B</u>.

22. Theodore D. Moustakas, Ph.D., Professor of Electrical and Computer Engineering at BU, is the named inventor of the '703 patent. The University owns by assignment the entire right, title, and interest in and to the '703 patent, including the sole right to sue for past patent infringements thereof.

23. The University is informed and believes, and thereon alleges, that Defendants without authority or license imported into the United States and/or offered to sell, sold, and/or used within the United States semiconductor devices made by processes covered by one or more claims of the '703 patent, including but not limited to Accused Devices and similar devices made by exposing sapphire substrate to activated nitrogen and depositing Group III nitride semiconductor material, said Accused Devices and semiconductor devices not being materially

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changed by subsequent processes or becoming a trivial and nonessential component of another product.

24. The University is informed and believes, and thereon alleges, that the applicable requirements of 35 U.S.C. § 287 have been satisfied.

25. The University is informed and believes, and thereon alleges, that Defendants have infringed one or more claims of the '703 patent, in violation of 35 U.S.C. § 271(g),

26. Defendants' acts of infringement have caused substantial and irreparable damage to the University.

27. As a result of the infringement of the '703 patent by Defendants, the University has been damaged. The University is, therefore, entitled to such damages pursuant to 35 U.S.C. § 284 in an amount that presently cannot be pled but that will be determined at trial.

28. The University is informed and believes, and thereon alleges, that Defendants' infringement of the '703 patent has been willful, systematic, and deliberate, that Defendants undertook its acts of infringement despite an objectively high likelihood that its actions constituted infringement of a valid patent, that this is an exceptional case within the meaning of 35 U.S.C. § 285, and that the University is entitled to recover its reasonable attorneys' fees incurred in this case as well as enhanced damages.

PRAYER FOR RELIEF

WHEREFORE, the University prays for entry of judgment against each Defendant as follows:

A. That Defendants infringed the '738 patent under 35 U.S.C. § 271(a) and the '703 patent under 35 U.S.C. § 271(g);

B. That Defendants provide to the University an accounting of all gains, profits and advantages derived by each Defendant's infringement of the '738 patent and the '703 patent, and

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that the University be awarded damages adequate to compensate them for the wrongful infringement by each Defendant, in accordance with 35 U.S.C. § 284;

C. That Defendants' acts of infringement have been and are willful and that the damages awarded to the University be trebled pursuant to 35 U.S.C. § 284 due to Defendants' willful infringement;

D. That this is an exceptional case and that the University be awarded any other supplemental damages and interest on all damages, including, but not limited to attorney fees available under 35 U.S.C. § 285.

E. That the Court preliminarily and thereafter permanently enjoin Defendants and all those in privity with them from importing, making, having made, selling, offering for sale, distributing and/or using products that infringe the '738 patent, including but not limited to SPHWHTHAD603S0R0MZ, SPHWWTHDD805WHT0GD, SPMWHT221MD5WAP0S0, SAMSUNG GALAXY TAB 2, SAMSUNG display model T24B350ND, model code LT24B350ND/ZA, SAMSUNG display model S27A550H, model code LS27A550HS/ZA, SAMSUNG display model UN22D5003BF, type UN22D5003, Chrome Book 11.6" (303C12-A01), Series 5 laptop 15.6" (NP510R5E-A02UB), Series 5 Ultra Book 13.3" (NP540UC3-A03UB), Series 7 Chronos Laptop 17.3" (NP700Z7C-S91UB) and the other Accused Products, in the United States; and

F. That the University be awarded such other and further relief as this Court may deem just and proper, including but not limited to equitable relief and all remedies available at law.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), the University hereby demands a trial

by jury on all issues triable to a jury.

Dated: April 25, 2013

Respectfully submitted,

TRUSTEES OF BOSTON UNIVERSITY

By its attorneys,

/s/ Ilan N. Barzilay Ilan N. Barzilay (BBO #643978) ibarzilay@seyfarth.com SEYFARTH SHAW LLP World Trade Center East Two Seaport Lane, Suite 300 Boston, Massachusetts 02210 Telephone: (617) 946-4800 Facsimile: (617) 946-4801

Of Counsel

Alfonso Garcia Chan (Texas 24012408) Eve Henson (Texas 00791462) Andrew M. Howard (Texas 24059973) SHORE CHAN BRAGALONE DEPUMPO LLP 901 Main Street, Suite 3300 Dallas, Texas 75202 Telephone: (214) 593-9110 Facsimile: (214) 593-9111

CERTIFICATE OF SERVICE

I hereby certify that this document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non-registered participants.

<u>/s/ Ilan N. Barzilay</u> Ilan N. Barzilay