

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

**INTELLECTUAL VENTURES I LLC
and INTELLECTUAL VENTURES II
LLC**

Plaintiffs,

v.

**ALTERA CORPORATION,
MICROSEMI CORPORATION,
LATTICE SEMICONDUCTOR
CORPORATION, and XILINX, INC.**

Defendants.

Civil Action No. 10-1065-LPS

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT

Plaintiffs INTELLECTUAL VENTURES I LLC (“Intellectual Ventures I”) and INTELLECTUAL VENTURES II LLC (“Intellectual Ventures II”) (collectively, “Intellectual Ventures I and II”), for their First Amended Complaint against Defendants ALTERA CORPORATION, MICROSEMI CORPORATION, LATTICE SEMICONDUCTOR CORPORATION and XILINX, INC. (collectively, “Defendants”), hereby allege as follows:

PARTIES

1. Intellectual Ventures I is a Delaware limited liability company with its principal place of business located in Bellevue, Washington.
2. Intellectual Ventures II is a Delaware limited liability company with its principal place of business located in Bellevue, Washington.
3. On information and belief, Defendant ALTERA CORPORATION (“Altera”) is a Delaware corporation having a principal place of business at 101 Innovation Drive, San Jose, California 95134. Altera may be served with process by serving its registered agent, Corporation Service Company, 2711 Centerville Road Suite 400, Wilmington, Delaware 19808.

4. On information and belief, Defendant MICROSEMI CORPORATION (“Microsemi”) is a Delaware corporation having a principal place of business at 2381 Morse Avenue, Irvine, California 92614. Microsemi may be served with process by serving its registered agent, United States Corporation Company, 2711 Centerville Road Suite 400, Wilmington, Delaware 19808.

5. On information and belief, Defendant LATTICE SEMICONDUCTOR CORPORATION (“Lattice”) is a Delaware corporation having a principal place of business at 5555 Northeast Moore Court, Hillsboro, Oregon 97124. Lattice may be served with process by serving its registered agent, The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

6. On information and belief, Defendant XILINX, INC. (“Xilinx”) is a Delaware corporation having a principal place of business at 2100 Logic Drive, San Jose, California 95124. Xilinx may be served with process by serving its registered agent, The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

NATURE OF THE ACTION

7. This is a civil action for the infringement of United States Patent No. 5,675,808 (“the ‘808 Patent”); United States Patent No. 6,993,669 (“the ‘669 Patent”); United States Patent No. 5,687,325 (“the ‘325 Patent”); United States Patent No. 6,260,087 (“the ‘087 Patent”); and United States Patent No. 6,272,646 (“the ‘646 Patent”) (collectively, “the Patents-in-Suit”) under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

JURISDICTION AND VENUE

8. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq.*

9. This Court has personal jurisdiction over Defendants because Defendants have committed acts of infringement in violation of 35 U.S.C. § 271 and have placed infringing products into the stream of commerce with the knowledge and/or understanding that such products are used and sold in this District. These acts cause injury to Intellectual Ventures I and II within the District. On information and belief, Defendants derive substantial revenue from the sale of infringing products distributed within the District, and/or expect or should reasonably expect their actions to have consequences within the District, and derive substantial revenue from interstate and international commerce. In addition, Defendants knowingly induced, and continue to knowingly induce, infringement within this State and within this District by contracting with others to market and sell infringing products with the knowledge and intent to facilitate infringing sales of the products by others within this District and by creating and/or disseminating data sheets and other instruction materials for the products with like mind and intent.

10. Venue is proper in this judicial district as to Defendants pursuant to 28 U.S.C. §§ 1391 and 1400(b).

THE PATENTS-IN-SUIT

11. Paragraphs 1-10 are reincorporated by reference as if fully set forth herein.

12. On October 7, 1997, the '808 Patent, titled "Power Control of Circuit Modules Within an Integrated Circuit," was duly and lawfully issued by the United States Patent and Trademark Office ("PTO"). The '808 Patent is attached hereto as Exhibit A.

13. Intellectual Ventures I owns the '808 Patent and holds the right to sue and recover damages for infringement thereof, including past infringement.

14. On January 31, 2006, the '669 Patent, titled "Low Power Clocking Systems and Methods," was duly and lawfully issued by the PTO. The '669 Patent is attached hereto as Exhibit B.

15. Intellectual Ventures I owns the '669 Patent and holds the right to sue and recover damages for infringement thereof, including past infringement.

16. On November 11, 1997, the '325 Patent, titled "Application Specific Field Programmable Gate Array," was duly and lawfully issued by the PTO. The '325 Patent is attached hereto as Exhibit C.

17. Intellectual Ventures II owns the '325 Patent and holds the right to sue and recover damages for infringement thereof, including past infringement.

18. On July 10, 2001, the '087 Patent, titled "Embedded Configurable Logic ASIC," was duly and lawfully issued by the PTO. The '087 Patent is attached hereto as Exhibit D.

19. Intellectual Ventures II owns the '087 Patent and holds the right to sue and recover damages for infringement thereof, including past infringement.

20. On August 7, 2001, the '646 Patent, titled "Programmable Logic Having an Integrated Phase Lock Loop," was duly and lawfully issued by the PTO. The '646 Patent is attached hereto as Exhibit E.

21. Intellectual Ventures II owns the '646 Patent and holds the right to sue and recover damages for infringement thereof, including past infringement.

FACTUAL BACKGROUND

22. Intellectual Ventures Management, LLC ("Intellectual Ventures") was founded in 2000. Since its founding, Intellectual Ventures has been deeply involved in the business of invention. Intellectual Ventures creates inventions and files patent applications for those inventions; collaborates with others to develop and patent inventions; and acquires and licenses patents from individual inventors, universities and other institutions. A significant aspect of Intellectual Ventures' business is managing the two plaintiffs in this case, Plaintiff Intellectual Ventures I and Plaintiff Intellectual Ventures II.

23. Intellectual Ventures' business includes purchasing important inventions from individual inventors and institutions and then licensing the inventions to those who need them.

Through this business, Intellectual Ventures allows inventors to reap a financial reward from their innovations, which is frequently difficult for individual inventors to do. To date, Intellectual Ventures has purchased more than 30,000 assets and, in the process, has paid individual inventors hundreds of millions of dollars for their inventions. Intellectual Ventures, in turn, has earned nearly \$2 billion by licensing these patents to some of the world's most innovative and successful technology companies who continue to use them to make computer equipment, software, semiconductor devices, and a host of other products.

24. Intellectual Ventures also creates inventions of its own. Intellectual Ventures has a staff of scientists and engineers who develop ideas in a broad range of fields, including agriculture, computer hardware, life sciences, medical devices, semiconductors, and software. Intellectual Ventures has invested millions of dollars developing such ideas and has filed hundreds of patent applications on its inventions every year, making it one of the top patent filers in the world. Intellectual Ventures has also invested in laboratory facilities to assist with the development and testing of new ideas.

25. Intellectual Ventures also creates inventions by collaborating with inventors and research institutions around the world. For example, Intellectual Ventures has developed inventions by selecting a technical challenge, requesting proposals for inventions to solve the challenge from inventors and institutions, selecting the most promising ideas, rewarding the inventors and institutions for their contributions, and filing patent applications on the ideas. Intellectual Ventures has invested millions of dollars in this way and has created a network of more than 3000 inventors worldwide.

26. Altera is a global semiconductor company that designs, manufactures and markets programmable logic devices (PLDs), including field programmable gate arrays (FPGAs). PLDs are integrated circuits that can be programmed for application in a variety of technologies, including telecommunications, wireless technology, military applications, broadcast, and networking. Altera has designed, manufactured and marketed billions of dollars' worth of PLD technology, including over \$1 billion in PLD revenue in 2009.

27. Beginning in 2009, Intellectual Ventures approached Altera about taking a license to Intellectual Ventures' patents. Over the next sixteen months, Intellectual Ventures discussed many of its patents with Altera, including several of the patents asserted against Altera in this complaint, in an effort to negotiate a license. Further, Intellectual Ventures explained to Altera how Altera was using Intellectual Ventures' patented inventions in its PLD products. Despite Intellectual Ventures' good faith efforts to negotiate a business solution, Altera has failed and refused to license Intellectual Ventures' patents on reasonable terms and continues to use those inventions without permission.

28. Microsemi is one of the world's largest semiconductor manufacturers. In November 2010, Microsemi announced its acquisition of Actel Corporation ("Actel"). Like Altera, Actel designs, markets and manufactures FPGA technology. Actel generated nearly \$200 million in revenue in 2009.

29. In early 2010, Intellectual Ventures approached Actel about a license to Intellectual Ventures' patents. Actel did not respond to Intellectual Ventures' repeated requests for a meeting. Despite Intellectual Ventures' good faith efforts to negotiate a business solution, Actel failed and refused to license Intellectual Ventures' patents on reasonable terms. Microsemi continues to use those inventions without permission.

30. Like Altera and Microsemi, Lattice is a global semiconductor company that designs, develops and markets PLD technology. Lattice generated nearly \$200 million in revenue in 2009.

31. Intellectual Ventures approached Lattice about a license to Intellectual Ventures' patents in October 2010. Despite Intellectual Ventures' good faith efforts to negotiate a business solution, Lattice has failed to respond. Lattice has refused to license Intellectual Ventures' patents on reasonable terms and continues to use those inventions without permission.

32. Xilinx, like the other Defendants, is a global semiconductor company that designs, develops and markets PLD technology. Xilinx generated over \$1.8 billion in revenue in 2010.

33. In 2010, Intellectual Ventures approached Xilinx about a license to Intellectual Ventures' patents, including the patents asserted against Xilinx in this complaint. Despite Intellectual Ventures' good faith efforts to negotiate a business solution, Xilinx has failed and refused to license Intellectual Ventures' patents on reasonable terms and continues to use those inventions without permission.

COUNT I

(Patent Infringement by Altera)

34. Paragraphs 1-33 are incorporated by reference as if fully restated herein.

35. Altera, either alone or in conjunction with others, has directly infringed and continues to directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '808, '669, '325, '087 and '646 Patents by making, using, offering to sell, selling and/or importing in or into the United States programmable logic devices (including but not limited to Stratix, Arria, and Cyclone products) without authority and in violation of 35 U.S.C. § 271.

36. Upon information and belief, Altera has been aware of the '808, '669, '325, '087 and '646 Patents at all relevant times.

37. Altera has actively induced, and continues to induce, the infringement of one or more claims of the '808, '669, '325, '087 and '646 Patents at least by actively inducing the use of infringing programmable logic devices by Altera's customers in the United States, including but not limited to Stratix, Arria and Cyclone products. Altera knew or should have known that its conduct would induce others to use its programmable logic devices in a manner that infringes the '808, '669, '325, '087 and '646 Patents.

38. Upon information and belief, Altera has willfully infringed the '325 and '087 Patents.

39. Intellectual Ventures I has suffered damages as a result of Altera's infringement of the '808 and '669 Patents.

40. Intellectual Ventures II has suffered damages as a result of Altera's infringement of the '669 Patent and Altera's willful infringement of the '325 and '087 Patents.

41. Altera's willful infringement of the '325 and '087 Patents renders this an exceptional case pursuant to 35 U.S.C. § 285.

COUNT II

(Patent Infringement by Microsemi)

42. Paragraphs 1-41 are incorporated by reference as if fully restated herein.

43. Microsemi, either alone or in conjunction with others, has directly infringed and continues to directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '325, '087, and '646 Patents by making, using, offering to sell, selling and/or importing in or into the United States programmable logic devices (including but not limited to Actel SmartFusion, Actel IGLOO, and Actel ProASIC devices) without authority and in violation of 35 U.S.C. § 271.

44. Upon information and belief, Microsemi has been aware of the '325, '087 and '646 Patents at all relevant times.

45. Microsemi has actively induced, and continues to induce, the infringement of one or more claims of the '325, '087 and '646 Patents at least by actively inducing the use of infringing programmable logic devices by Microsemi's customers in the United States, including but not limited to Actel SmartFusion, Actel IGLOO, and Actel ProASIC products. Microsemi knew or should have known that its conduct would induce others to use its programmable logic devices in a manner that infringes the '325, '087 and '646 Patents.

46. Intellectual Ventures II has suffered damage as a result of Microsemi's infringement of the '325, '087 and '646 Patents.

COUNT III

(Patent Infringement by Lattice)

47. Paragraphs 1-46 are incorporated by reference as if fully restated herein.

48. Lattice, either alone or in conjunction with others, has directly infringed and continues to directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '669, '325, '087 and '646 Patents by making, using, offering to sell, selling and/or importing in or into the United States programmable logic devices (including but not limited to Lattice EC, Lattice ECP, Lattice SC/M, Lattice XP2, and MachXO devices) without authority and in violation of 35 U.S.C. § 271.

49. Upon information and belief, Lattice has been aware of the '669, '325, '087 and '646 Patents at all relevant times.

50. Lattice has actively induced, and continues to induce, the infringement of one or more claims of the '669, '325, '087 and '646 Patents at least by actively inducing the use of infringing programmable logic devices by Lattice's customers in the United States, including but not limited to Lattice EC, Lattice ECP, Lattice SC/M, Lattice XP2, and MachXO products. Lattice knew or should have known that its conduct would induce others to use its programmable logic devices in a manner that infringes the '669, '325, '087 and '646 Patents.

51. Intellectual Ventures I has suffered damage as a result of Lattice's infringement of the '669 Patent.

52. Intellectual Ventures II has suffered damage as a result of Lattice's infringement of the '325, '087 and '646 Patents.

COUNT IV

(Patent Infringement by Xilinx)

53. Paragraphs 1-52 are incorporated by reference as if fully restated herein.

54. Xilinx, either alone or in conjunction with others, has directly infringed and continues to directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '669, '325, '087 and '646 Patents by making, using, offering to sell, selling and/or

importing in or into the United States programmable logic devices (including but not limited to Virtex and Spartan devices) without authority and in violation of 35 U.S.C. § 271.

55. Upon information and belief, Xilinx has been aware of the '669, '325, '087 and '646 Patents at all relevant times.

56. Xilinx has actively induced, and continues to induce, the infringement of one or more claims of the '669, '325, '087 and '646 Patents at least by actively inducing the use of infringing programmable logic devices by Xilinx's customers in the United States, including but not limited to Virtex and Spartan products. Xilinx knew or should have known that its conduct would induce others to use its programmable logic devices in a manner that infringes the '669, '325, '087 and '646 Patents.

57. Upon information and belief, Xilinx has willfully infringed the '669, '325, '087 and '646 Patents.

58. Intellectual Ventures I has suffered damage as a result of Xilinx's willful infringement of the '669 Patent.

59. Intellectual Ventures II has suffered damage as a result of Xilinx's willful infringement of the '325, '087 and '646 Patents.

PRAYER FOR RELIEF

WHEREFORE, Intellectual Ventures I and II respectfully request the following relief:

- a) A judgment that Altera has infringed the '808 Patent;
- b) A judgment that Altera has infringed the '669 Patent;
- c) A judgment that Altera has infringed the '325 Patent;
- d) A judgment that Altera has infringed the '087 Patent;
- e) A judgment that Altera has infringed the '646 Patent;

f) A judgment that Intellectual Ventures I be awarded damages adequate to compensate Intellectual Ventures I for Altera's past infringement and any continuing or future infringement of the '808 Patent and the '669 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures I for Altera's infringement, an accounting:

- a. that this case is exceptional under 35 U.S.C. § 285;
- b. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action;
and
- c. that Intellectual Ventures I be awarded such further relief at law or in equity as the Court deems just and proper.

g) A judgment that Intellectual Ventures II be awarded damages adequate to compensate Intellectual Ventures II for Altera's past infringement and any continuing or future infringement of the '325 Patent, the '087 Patent and the '646 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures II for Altera's infringement, an accounting:

- a. that Altera's infringement of the '325 Patent and the '087 Patent has been willful and trebling all damages awarded to Intellectual Ventures II for such infringement pursuant to 35 U.S.C. § 284;
- b. that this case is exceptional under 35 U.S.C. § 285;
- c. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action;
and
- d. that Intellectual Ventures II be awarded such further relief at law or in equity as the Court deems just and proper.

h) A judgment that Microsemi has infringed the '325 Patent;

- i) A judgment that Microsemi has infringed the '087 Patent;
- j) A judgment that Microsemi has infringed the '646 Patent;
- k) A judgment that Intellectual Ventures II be awarded damages adequate to compensate Intellectual Ventures II for Microsemi's past infringement and any continuing or future infringement of the '325 Patent, the '087 Patent and the '646 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures II for Microsemi's infringement, an accounting:

- a. that this case is exceptional under 35 U.S.C. § 285;
- b. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action;
and
- c. that Intellectual Ventures II be awarded such further relief at law or in equity as the Court deems just and proper.

- l) A judgment that Lattice has infringed the '669 Patent;
- m) A judgment that Lattice has infringed the '325 Patent;
- n) A judgment that Lattice has infringed the '087 Patent;
- o) A judgment that Lattice has infringed the '646 Patent;
- p) A judgment that Intellectual Ventures I be awarded damages adequate to compensate Intellectual Ventures I for Lattice's past infringement and any continuing or future infringement of the '669 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures I for Lattice's infringement, an accounting:

- a. that this case is exceptional under 35 U.S.C. § 285;
- b. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action;
and

- c. that Intellectual Ventures I be awarded such further relief at law or in equity as the Court deems just and proper.

q) A judgment that Intellectual Ventures II be awarded damages adequate to compensate Intellectual Ventures II for Lattice's past infringement and any continuing or future infringement of the '325 Patent, the '087 Patent and the '646 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures II for Lattice's infringement, an accounting:

- a. that this case is exceptional under 35 U.S.C. § 285;
- b. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action; and
- c. that Intellectual Ventures II be awarded such further relief at law or in equity as the Court deems just and proper.

r) A judgment that Xilinx has infringed the '669 Patent;

s) A judgment that Xilinx has infringed the '325 Patent;

t) A judgment that Xilinx has infringed the '087 Patent;

u) A judgment that Xilinx has infringed the '646 Patent;

v) A judgment that Intellectual Ventures I be awarded damages adequate to compensate Intellectual Ventures I for Xilinx's past infringement and any continuing or future infringement of the '669 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures I for Xilinx's infringement, an accounting:

- a. that Xilinx's infringement of the '669 Patent has been willful and trebling all damages awarded to Intellectual Ventures I for such infringement pursuant to 35 U.S.C. § 284;
- b. that this case is exceptional under 35 U.S.C. § 285;

- c. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action; and
- d. that Intellectual Ventures I be awarded such further relief at law or in equity as the Court deems just and proper.

w) A judgment that Intellectual Ventures II be awarded damages adequate to compensate Intellectual Ventures II for Xilinx's past infringement and any continuing or future infringement of the '325 Patent, the '087 Patent and the '646 Patent up until the date such judgment is entered, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Intellectual Ventures II for Xilinx's infringement, an accounting:

- a. that Xilinx's infringement of the '325, '087 and '646 Patents has been willful and trebling all damages awarded to Intellectual Ventures II for such infringement pursuant to 35 U.S.C. § 284;
- b. that this case is exceptional under 35 U.S.C. § 285;
- c. that Intellectual Ventures I and Intellectual Ventures II be awarded the attorney fees, costs, and expenses that they incur in prosecuting this action; and
- d. that Intellectual Ventures II be awarded such further relief at law or in equity as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Intellectual Ventures I and Intellectual Ventures II hereby demand trial by jury on all claims and issues so triable.

DATED: February 15, 2011

Respectfully submitted,

/s/ Brian E. Farnan
Brian E. Farnan (Bar No. 4089)
Farnan LLP
919 North Market Street
12th Floor
Wilmington, DE 19801
(302) 777-0300
(302) 777-0301
bfarnan@farnanlaw.com

John M. Desmarais (admitted pro hac vice)
Michael P. Stadnick (admitted pro hac vice)
DESMARAIS LLP
230 Park Avenue
New York, NY 10169
(212) 351-3400
(212) 351-3401
jdesmarais@desmaraisllp.com
mstadnick@desmaraisllp.com

Counsel for Plaintiffs