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# UNITED STATES DISTRICT COURT DISTRICT OF OREGON PORTLAND DIVISION

#### MENTOR GRAPHICS CORPORATION, an

Oregon corporation,

Plaintiff and Counter-Defendant,

V.

EVE-USA, INC., a Delaware corporation, and SYNOPSYS EMULATION AND VERIFICATION S.A., formed under the laws of France.

Defendants and Counter-Claimants.

SYNOPSYS, INC., a Delaware corporation, EVE-USA, INC., a Delaware corporation, and SYNOPSYS EMULATION AND VERIFICATION S.A., formed under the laws of France,

Plaintiffs and Counter-Defendants,

V.

MENTOR GRAPHICS CORPORATION, an

Oregon corporation,

Defendant and Counter-Claimant.

Case No. 3:10-CV-00954-MO (Lead) Case No. 3:12-CV-01500-MO Case No. 3:13-CV-00579-MO

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, DECLARATIONS OF INVALIDITY AND NON-INFRINGEMENTS, AND INJUNCTIVE RELIEF

By Synopsys, Inc., Synopsys Emulation and Verifications S.A. and EVE-USA. Inc.

**DEMAND FOR JURY TRIAL** 

1- FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, DECLARATIONS OF INVALIDITY AND NON-INFRINGEMENTS, AND INJUNCTIVE RELIEF

Perkins Coie LLP 1120 N.W. Couch Street, Tenth Floor Portland, OR 97209-4128 Phone: 503.727.2000 Fax: 503.727.2222 In Case No. 3:13-cv-579-MO, Plaintiffs Synopsys, Inc., EVE-USA, Inc. and Synopsys Emulation and Verification S.A. (collectively, "Plaintiffs") allege as follows:

## THE PARTIES

- 1. Plaintiff Synopsys, Inc. ("Synopsys") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Mountain View, California.
- 2. Plaintiff EVE-USA, Inc. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in San Jose, California.
- 3. Plaintiff Synopsys Emulation and Verification S.A. is a French corporation headquartered in Wissous, France. Plaintiffs EVE-USA, Inc. and Synopsys Emulation and Verification S.A. are collectively referred to herein as "EVE."
- 4. Defendant Mentor Graphics Corp. ("Mentor Graphics") is a corporation organized and existing under the laws of the State of Oregon. Mentor Graphics has five offices or sites in California (Fremont, Folsom, El Segundo, Irvine and San Diego) and additional offices in other parts of the United States.

#### **BACKGROUND**

- 5. Mentor Graphics has alleged in a Complaint filed in the United States District Court for the District of Oregon, Case No. 6:06-cv-00341-AA, that it owns all right, title and interest in U.S. Patent No. 6,009,531 ("the '531 patent"), entitled "Transition Analysis and Circuit Resynthesis Method and Device for Digital Circuit Modeling," which issued on or about December 28, 1999. This action was dismissed with prejudice on November 30, 2006.
- 6. Mentor Graphics also alleged in a Complaint filed in the United States District Court for the District of Oregon, Case No. 6:06-cv-00341-AA, that it owns all right, title and interest in U.S. Patent No. 5,649,176 ("the '176 patent"), entitled "Transition Analysis and Circuit Resynthesis Method and Device for Digital Circuit Modeling," which issued on or about July 15, 1997. This action was dismissed with prejudice on November 30, 2006.

2- FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, DECLARATIONS OF INVALIDITY AND NON-INFRINGEMENTS, AND INJUNCTIVE RELIEF

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7. Mentor Graphics also alleged in a Complaint filed in the United States District Court for the District of Oregon, Case No. 6:06-cv-00341-AA, that it owns all right, title and interest in U.S. Patent No. 6,240,376 ("the '376 patent"), entitled "Method and Apparatus for Gate-Level Simulation of Synthesized Register Transfer Level Designs With Source-Level Debugging," which issued on or about May 29, 2001. This action was dismissed with prejudice on November 30, 2006.

#### **JURISDICTION AND VENUE**

- 8. This action arises under the Declaratory Judgment Act and the patent laws of the United States, more particularly under Title 28 U.S.C. §§ 2201 and 2202 and Title 35 U.S.C. §§ 100 et. seq. and 271, respectively. This court has jurisdiction under Title 28 U.S.C. §§ 1331, 1338 and 2201.
- 9. Mentor Graphics is subject to personal jurisdiction in this Court, including because it has its principal place of business in Wilsonville, Oregon.
- 10. Venue is proper in this District under 28 U.S.C. §§ 1391(b) and (c) and 1400(b) because Mentor Graphics transacts business in this district, is subject to personal jurisdiction in this District, and has committed acts of infringement in this district.
- 11. Mentor Graphics has alleged that the ZeBu line of hardware-assisted verification products, which are manufactured, imported, sold and offered for sale by EVE (hereinafter the "ZeBu Products"), infringe the '531, '176 and '376 patents. On or about March 13, 2006, Mentor Graphics filed a Complaint in the United States District Court for the District of Oregon, Case No. 6:06-cv-00341-AA, which alleged that EVE infringed the '531 patent by selling and supporting the ZeBu Products. On or about May 19, 2006, Mentor Graphics filed a First Amended Complaint, which alleged that EVE infringed the '531, '176 and '376 patents directly, contributorily and by inducement, by selling and supporting the ZeBu Products. On November 30, 2006, the action was dismissed with prejudice and the parties finalized a settlement agreement in December 2006.

3- FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, DECLARATIONS OF INVALIDITY AND NON-INFRINGEMENTS, AND INJUNCTIVE RELIEF 79654-0003/LEGAL26910398.1

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- 12. On or about August 12, 2010, Mentor Graphics initiated a second litigation against EVE by filing a Complaint in the United District Court for the District of Oregon, Case No. 3:10-cv-00954-MO, alleging that EVE infringes U.S. Patent No. 6,876,962 by making, using, selling, offering for sale, importing and supporting the ZeBu Products.
- 13. On or about August 17, 2012, Mentor Graphics commenced a third litigation against EVE by filing yet another Complaint in the United States District Court for the District of Oregon, Case No. 3:12-cv-01500-SI, alleging that EVE infringes U.S. Patent No. 6,947,882 by making, using, selling, offering for sale, importing and supporting the ZeBu Products. The District of Oregon consolidated these two cases (No. 3:10-cv-00954-MO and No. 3:12-cv-01500-SI) on or about November 7, 2012.
- 14. On September 27, 2012, Synopsys, Inc. entered into an agreement to acquire the business of EVE, including the ZeBu Products. The proposed acquisition closed Oct. 4, 2012. Accordingly, Plaintiffs are importing, selling, offering for sale and/or supporting the ZeBu Products in the United States, which line of products was previously accused by Mentor Graphics of infringing the '531, '176 and '376 patents and which products share structures and functionality that Mentor Graphics alleged are relevant to the claims of the '531, '176 and '376 patents.
- 15. On August 20, 2012, Dr. Walden C. Rhines, Chairman and Chief Executive Officer of Mentor Graphics, wrote to Dr. Aart de Geus, Chairman and Co-Chief Executive Officer of Synopsys, Inc. In reference to a published rumor that Synopsys, Inc. was in discussions to acquire the business of EVE, Dr. Rhines stated that the settlement agreement entered into between Mentor Graphics and EVE in 2006 contains terms that may be considered "material" to the acquisition, and that Dr. de Geus "should ensure [his] team is aware" of them.
- 16. Upon information and belief, and given the terms of the 2006 settlement agreement, coupled with the timing of the communication, Mentor Graphics' statements were meant to convey an explicit threat that should Synopsys, Inc. consummate its contemplated

4- FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, DECLARATIONS OF INVALIDITY AND NON-INFRINGEMENTS, AND INJUNCTIVE RELIEF 79654-0003/LEGAL26910398.1

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acquisition of EVE, Synopsys and/or EVE would thereupon be subject to suit by Mentor Graphics for patent infringement of the '531, '176 and '376 patents.

- 17. Based on the acts, conduct and statements of Mentor Graphics, there exists an actual and substantial controversy, within the meaning of 28 U.S.C. §§ 2201 and 2202, between Plaintiffs and Mentor Graphics, as to whether Plaintiffs or any of the ZeBu Products have infringed, or continue to infringe, any of the claims of the '531, '176 and '376 patents, as to whether the claims of the '531, '176 and '376 patents are valid, and as to whether Mentor Graphics is without right or authority to threaten or to maintain suit against Plaintiffs for alleged infringement of the '531, '176 and '376 patents.
- 18 On January 11, 2013, Mentor Graphics filed counterclaims in this action alleging that Synopsys and EVE infringe the '531, '176, and '376 patents by making, using, selling, offering for sale, importing and supporting the ZeBu Products. On April 25, 2013, the District of Oregon consolidated this case (Case No. 3:13-cv-579-ST) with Case Nos. 3:10-cv-00954-MO and No. 3:12-cv-01500-MO.

#### COUNT I

## (Declaratory Judgment of Invalidity – Synopsys and EVE v. Mentor Graphics)

- 19. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs as though set forth in full herein.
- 20. This is a claim for declaratory judgment of invalidity of any and all claims of the '531, '176 and '376 patents.
- 21. The '531, '176 and '376 patents, and each claim thereof, are invalid under one or more provisions of Title 35 of the United States Code, including, without limitation, Sections 101, 102, 103 and 112.
- 22. The claims of the '531, '176 and '376 patents are invalid because they are vague and indefinite and do not particularly point out and distinctly claim the subject matter which the applicants regarded as their alleged inventions, as required by 35 U.S.C. § 112.

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- 23. The claims of the '531, '176 and '376 patents are invalid because the specifications of the '531, '176 and '376 patents do not contain a written description of the invention and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the same, as required by 35 U.S.C. § 112.
- 24. The claims of the '531, '176 and '376 patents are invalid for failure to meet the conditions for patentability set forth in 35 U.S.C. §§ 102 and 103.
- 25. Absent a declaration of invalidity, Mentor Graphics will continue to wrongfully assert or threaten to assert the '531, '176 and '376 patents against Plaintiffs, in violation of the laws and contrary to the public policy of the United States, and will thereby continue to cause Plaintiffs irreparable injury and damage.
- 26. A judicial determination on the disputes recited herein is necessary and appropriate at this time so the parties may ascertain their respective rights and obligations with respect to the '531, '176 and '376 patents and any past, present or future manufacture, use, importation, distribution, sale, or offer for sale of ZeBu Products.
- 27. Synopsys, Inc. filed a petition for *inter partes* review of the patentability of the claims of U.S. Patent No. 6,240,376 with the United States Patent and Trademark Office. On February 22, 2013, the Patent Trial and Appeal Board instituted an *inter partes* review trial; Mentor Graphics subsequently requested rehearing, and on April 11, 2013 the Board denied the request. Adjudication of this action as to the '376 patent was not automatically stayed under 35 U.S.C. § 315(a)(2)(B) because Mentor Graphics filed a counterclaim in this action alleging that Plaintiffs have infringed the '376 patent.

#### **COUNT II**

## (Declaratory Judgment of Non-Infringement – Synopsys and EVE v. Mentor Graphics)

- 28. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs as though set forth in full herein.
- 29. This is a claim for declaratory judgment of non-infringement of any valid claims of the '531, '176 and '376 patents.
- 30. Plaintiffs do not directly, contributorily, or by inducement, infringe any claim of the '531, '176 and '376 patents, either literally or under the doctrine of equivalents.
- 31. The manufacture, importation, use, sale, or offer for sale of any of the ZeBu Products in the United States does not directly infringe, contributorily infringe, or induce infringement of any claim of the '531, '176 and '376 patents, either literally or under the doctrine of equivalents.
- 32. Defendant Mentor Graphics is without right or authority to threaten or to maintain suit against Plaintiffs for alleged infringement of the '531, '176 and '376 patents.
- 33. Absent a declaration of non-infringement, Mentor Graphics will continue to wrongfully assert or threaten to assert the '531, '176 and '376 patents against Plaintiffs, in violation of the laws and contrary to the public policy of the United States, and will thereby continue to cause Plaintiffs irreparable injury and damage.
- 34. A judicial determination on the disputes recited herein is necessary and appropriate at this time so the parties may ascertain their respective rights and obligations with respect to the '531, '176 and '376 patents and any past, present or future manufacture, use, importation, distribution, sale, or offer for sale of ZeBu Products.

#### **COUNT III**

## (Patent Infringement of U.S. Patent No. 6,132,109 - Synopsys v. Mentor Graphics)

35. Synopsys incorporates by reference the allegations contained in the preceding paragraphs as though set forth in full herein.

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- 36. Synopsys is the owner of all rights, title and interest in the '109 patent, entitled "Architecture and Methods for a Hardware Description Language Source Level Debugging System," which was duly and legally issued on October 17, 2000. A copy of the patent is attached to this complaint as Exhibit A.
- 37. Mentor Graphics has been and is currently directly infringing one or more claims of the '109 patent, including at least claim 1, in violation of 35 U.S.C. § 271(a) by making, using, offering to sell and selling within the United States, and/or importing into the United States, products and services that practice the inventions claimed in the '109 patent, including specifically the Veloce family of products and their related services, and, unless enjoined, will continue to do so.
- 38. Mentor Graphics has been aware of the existence of the '109 patent since at least September 27, 2012, the date on which Mentor Graphics received Synopsys's petition for *inter partes* review of the '376 patent, which cited the '109 patent as prior art. Mentor Graphics' infringement, therefore, has been and continues to be willful.
- 39. Mentor Graphics has been and is currently actively inducing and encouraging infringement of at least one claim of the '109 patent in violation of 35 U.S.C. § 271(b), and Mentor Graphics will continue to do so unless permanently enjoined. With actual knowledge of the '109 patent at least as of the date of this Complaint, Mentor Graphics actively induces and encourages its customers' direct infringement of the '109 patent by instructing said customers to use its products in a manner that directly infringes the '109 patent, including, for example, by instructing said customers to run the Veloce family of products to create, analyze, diagnose and/or debug integrated circuit designs. Mentor Graphics does so with the specific intent to induce and encourage such infringement, or, at a minimum, with willful blindness to the known risk of such infringement.
- 40. In violation of 35 U.S.C. § 271(c), Mentor Graphics has been and is currently contributing to the infringement of the '109 patent by selling and/or offering to sell within the

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8- FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, DECLARATIONS OF INVALIDITY AND NON-INFRINGEMENTS, AND INJUNCTIVE RELIEF 79654-0003/LEGAL26910398.1

United States products that are material components of systems that practice or embody the invention claimed in the '109 patent, and Mentor Graphics will continue to do so unless permanently enjoined. With actual knowledge of the '109 patent at least as of the date of this Complaint, Mentor Graphics sells and offer to sell products to its customers, including specifically the Veloce family of products, knowing that these products are especially made or adapted for use in a manner that infringes the '109 patent, and knowing that these products are not staple articles or commodities of commerce suitable for substantial non-infringing use.

41. As a direct and proximate consequence of Mentor Graphics' infringement of the '109 patent, Synopsys has suffered and will continue to suffer irreparable injury for which there is no adequate remedy at law and damages in an amount yet to be determined for which Synopsys is entitled to relief. Under 35 U.S.C. §§ 283 and 284, Synopsys is entitled to recover damages as well as permanent injunctive relief against further infringement.

## **COUNT IV**

## (Patent Infringement of U.S. Patent No. 7,069,526 - Synopsys v. Mentor Graphics)

- 42. Synopsys incorporates by reference the allegations contained in the preceding paragraphs as though set forth in full herein.
- 43. Synopsys is the owner of all rights, title and interest in the '526 patent, entitled "Hardware Debugging in a Hardware Description Language," which was duly and legally issued on June 27, 2006. A copy of the patent is attached to this complaint as Exhibit B.
- 44. Mentor Graphics has been and is currently directly infringing one or more claims of the '526 patent, including at least claims 19, 23, 24, 28, 29, 30, and 33, in violation of 35 U.S.C. § 271(a) by making, using, offering to sell and selling within the United States, and/or importing into the United States, products and services that practice the inventions claimed in the '526 patent, including specifically the Veloce family of products and their related services, and, unless enjoined, will continue to do so.

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- 45. Mentor Graphics has been and is currently actively inducing and encouraging infringement of at least one claim of the '526 patent in violation of 35 U.S.C. § 271(b), and Mentor Graphics will continue to do so unless permanently enjoined. With actual knowledge of the '526 patent at least as of the date of this Complaint, Mentor Graphics actively induces and encourages its customers' direct infringement of the '526 by instructing said customers to use its products in a manner that directly infringes the '526 patent, including, for example, by instructing said customers to run the Veloce family of products to create, analyze, diagnose and/or debug integrated circuit designs. Mentor Graphics does so with the specific intent to induce and encourage such infringement, or, at a minimum, with willful blindness to the known risk of such infringement.
- 46. In violation of 35 U.S.C. § 271(c), Mentor Graphics has been and is currently contributing to the infringement of the '526 patent by selling and/or offering to sell within the United States products that are material components of systems that practice or embody the invention claimed in the '526 patent, and Mentor Graphics will continue to do so unless permanently enjoined. With actual knowledge of the '526 patent at least as of the date of this Complaint, Mentor Graphics sells and offers to sell products to its customers, including specifically the Veloce family of products, knowing that these products are especially made or adapted for use in a manner that infringes the '526 patent, and knowing that these products are not staple articles or commodities of commerce suitable for substantial non-infringing use.
- 47. As a direct and proximate consequence of Mentor Graphics' infringement of the '526 patent, Synopsys has suffered and will continue to suffer irreparable injury for which there is no adequate remedy at law and damages in an amount yet to be determined for which Synopsys is entitled to relief. Under 35 U.S.C. §§ 283 and 284, Synopsys is entitled to recover damages as well as permanent injunctive relief against further infringement.

WHEREFORE, Plaintiffs pray for judgment against Mentor Graphics as follows:

1. Entry of judgment that:

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- a. Defendant Mentor Graphics is without right or authority to threaten or to maintain suit against Plaintiffs for alleged infringement of the '531, '176 and '376 patents;
- b. said patents are invalid;
- said patents are not infringed and have not been infringed by Plaintiffs or by
  the manufacture, use, sale, offer for sale, or importation of Plaintiffs'
  products, by Plaintiffs or otherwise; and
- d. Mentor Graphics has infringed, directly and indirectly, one or more claims of each of the '109 and '526 patents.
- 2. Entry of preliminary and, following trial, permanent injunctions enjoining Defendant, its officers, agents, servants, employees, licensees and attorneys and those persons in active concert or participation with them and all others in privity therewith from:
  - a. initiating or prosecuting any lawsuit or proceeding placing at issue the right of Plaintiffs, their customers, licensees, successors, assigns and all others in privity therewith, to make, use, sell, offer for sale or import Plaintiffs' products, with respect to the '531, '176 and '376 patents;
  - b. interfering with or threatening to interfere with the manufacture, sale, offer for sale, use or importation of Plaintiffs' products by Plaintiffs, or each of them, or any of their customers, licensees, dealers, agents, servants, or employees, or any prospective or present sellers, dealers, or users of Plaintiffs' products, and all others in privity therewith, with respect to the '531, '176 and '376 patents;
  - c. making any claim to any person or entity that Plaintiffs' products infringe the '531, '176 and '376 patents;

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3. That this case is declared exceptional under 35 U.S.C. § 285, and that Plaintiffs be awarded their reasonable attorney fees, costs and expenses incurred in connection with this action; and

4 That this Court grant the Plaintiffs such other further relief as the Court deems appropriate.

**AND WHEREFORE**, Synopsys further prays for judgment against Mentor Graphics as follows:

5. Entry of preliminary and, following trial, permanent injunctions enjoining Defendant, its officers, agents, servants, employees, licensees and attorneys and those persons in active concert or participation with them and all others in privity therewith from infringing, directly or indirectly, the '109 and '526 patents.

- 6. Damages to compensate Synopsys for Mentor Graphics' infringement, including treble damages for willful infringement and all compensatory damages incurred before entry of final judgment in the case; and
- 7. An award of all pre-judgment and post-judgment interest and costs to Synopsys.

#### JURY DEMAND

Plaintiffs hereby demand trial by jury on all issues triable to a jury.

PERKINS COIE LLP DATED: June 4, 2013

By: s/ Stephen F. English

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