

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

AMBERWAVE SYSTEMS CORPORATION, )

Plaintiff, )

v. )

INTEL CORPORATION, )

Defendant. )

C.A. No. 05-301 (KAJ)  
(Consolidated)

**DEMAND FOR JURY TRIAL**

**PLAINTIFF AMBERWAVE SYSTEMS CORPORATION'S SECOND AMENDED  
AND SUPPLEMENTAL COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff AmberWave Systems Corporation ("AmberWave"), for its Second Amended and Supplemental Complaint against Defendant Intel Corporation ("Intel"), alleges as follows:

**INTRODUCTION**

1. AmberWave is a small technology and engineering firm founded by a university professor and his former students. AmberWave develops innovative technology for the production of semiconductor devices. For years, Intel has been improving the performance of its semiconductor devices by shrinking the size of their fundamental components. Intel now finds itself unable to continue its historical pace of performance enhancement using its own technological developments. In order to defend its market position against inroads by competitors, Intel is using AmberWave's patented inventions to enable the production of faster and more efficient semiconductor devices—without obtaining a license from AmberWave. This action seeks redress for Intel's infringing activities.

### **PARTIES AND JURISDICTION**

2. This is an action for patent infringement arising under the United States Patent Act, 35 U.S.C. § 101 *et seq.*

3. AmberWave is a Delaware corporation with its principal place of business in Salem, New Hampshire.

4. AmberWave is informed and believes, and thereon alleges, that Intel is a Delaware corporation with its principal place of business in Santa Clara, California.

5. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a). Venue in this District is proper under 28 U.S.C. §§ 1391 and 1400(b).

### **THE PATENTS IN SUIT**

6. United States Patent No. 6,831,292 (the "'292 patent"), entitled "Semiconductor Structures Employing Strained Material Layers With Defined Impurity Gradients And Methods For Fabricating Same," was duly and legally issued on December 14, 2004. AmberWave is the owner by assignment of all right, title and interest in and to the '292 patent. A true and correct copy of the '292 patent is attached hereto as Exhibit A.

7. United States Patent No. 6,881,632 (the "'632 patent"), entitled "Method of Fabricating CMOS Inverter And Integrated Circuits Utilizing Strained Surface Channel MOSFETS," was duly and legally issued on April 19, 2005. AmberWave is the owner by assignment of all right, title and interest in and to the '632 patent. A true and correct copy of the '632 patent is attached as Exhibit B.

8. United States Patent No. 6,946,371 (the "'371 patent"), entitled "Method of Fabricating Semiconductor Structures Having Epitaxially Grown Source And Drain Elements," was duly and legally issued on September 20, 2005. AmberWave is the owner by assignment of all right, title and interest in and to the '371 patent. A true and correct copy of the '371 patent is attached as Exhibit C.

9. United States Patent No. 7,122,449 (the “ ‘449 patent”), entitled “Methods of Fabricating Semiconductor Structures Having Epitaxially Grown Source and Drain Elements,” was duly and legally issued on October 17, 2006. AmberWave is the owner by assignment of all right, title and interest in and to the ‘449 patent. A true and correct copy of the ‘449 patent is attached as Exhibit D.

**CLAIMS FOR RELIEF**

**COUNT I**

**(Infringement of the '292 Patent by Intel)**

10. AmberWave incorporates by reference paragraphs 1 through 9 as if set forth here in full.

11. AmberWave is informed and believes, and thereon alleges, that in violation of 35 U.S.C. § 271, Intel has been and is currently directly infringing, contributorily infringing, and/or inducing infringement of, the '292 patent by, among other things, making, using, offering to sell, selling and/or importing, without authority or license from AmberWave, certain semiconductor devices.

12. AmberWave is informed and believes, and thereon alleges, that Intel's infringement of the '292 patent has been and continues to be willful.

13. Unless enjoined, Intel will continue to infringe the '292 patent, and AmberWave will suffer irreparable injury as a direct and proximate result of Intel's conduct.

14. AmberWave has been damaged by Intel's conduct, and until an injunction issues will continue to be damaged in an amount yet to be determined.

**COUNT II**

**(Infringement of the '632 Patent by Intel)**

15. AmberWave incorporates by reference paragraphs 1 through 9 as if set forth here in full.

16. AmberWave is informed and believes, and thereon alleges, that in violation of 35 U.S.C. § 271, Intel has been and is currently directly infringing, contributorily infringing, and/or inducing infringement of, the '632 patent by, among other things, making, using, offering to sell, selling and/or importing, without authority or license from AmberWave, certain semiconductor devices.

17. AmberWave is informed and believes, and thereon alleges, that Intel's infringement of the '632 patent has been and continues to be willful.

18. Unless enjoined, Intel will continue to infringe the '632 patent, and AmberWave will suffer irreparable injury as a direct and proximate result of Intel's conduct.

19. AmberWave has been damaged by Intel's conduct, and until an injunction issues will continue to be damaged in an amount yet to be determined.

### **COUNT III**

#### **(Infringement of the '371 Patent by Intel)**

20. AmberWave incorporates by reference paragraphs 1 through 9 as if set forth here in full.

21. AmberWave is informed and believes, and thereon alleges, that in violation of 35 U.S.C. § 271, Intel has been and is currently directly infringing, contributorily infringing, and/or inducing infringement of, the '371 patent by, among other things, making, using, offering to sell, selling and/or importing, without authority or license from AmberWave, certain semiconductor devices.

22. AmberWave is informed and believes, and thereon alleges, that Intel's infringement of the '371 patent has been and continues to be willful.

23. Unless enjoined, Intel will continue to infringe the '371 patent, and AmberWave will suffer irreparable injury as a direct and proximate result of Intel's conduct.

24. AmberWave has been damaged by Intel's conduct, and until an injunction issues will continue to be damaged in an amount yet to be determined.

#### **COUNT IV**

##### **(Infringement of the '449 Patent by Intel)**

25. AmberWave incorporates by reference paragraphs 1 through 9 as if set forth here in full.

26. AmberWave is informed and believes, and thereon alleges, that in violation of 35 U.S.C. § 271, Intel is currently directly infringing, contributorily infringing, and/or inducing infringement of, the '449 patent by, among other things, making, using, offering to sell, selling and/or importing, without authority or license from AmberWave, certain semiconductor devices.

27. AmberWave is informed and believes, and thereon alleges, that Intel's infringement of the '449 patent is willful.

28. Unless enjoined, Intel will continue to infringe the '449 patent, and AmberWave will suffer irreparable injury as a direct and proximate result of Intel's conduct.

29. AmberWave is damaged by Intel's conduct, and until an injunction issues will continue to be damaged in an amount yet to be determined.

#### **PRAYER FOR RELIEF**

WHEREFORE, AmberWave prays for relief as follows:

A. For a determination that Intel has infringed and is infringing the '292 patent, the '632 patent, the '371 patent, and the '449 patent, and that Intel's infringement is willful;

B. For an order preliminarily and permanently enjoining Intel, and its directors, officers, employees, attorneys, agents and all persons in active concert or participation with any of the foregoing from acts of infringement of the '292 patent, the '632 patent, the '371 patent, and the '449 patent;

C. For damages resulting from infringement of the '292 patent, the '632 patent, the '371 patent, and the '449 patent in an amount to be determined at trial, and the trebling of such damages due to the willful nature of Intel's infringement;

D. For an award of interest on damages;

E. For a declaration that this case is exceptional pursuant to 35 U.S.C. § 285 and an award of attorneys' fees and costs; and

F. For an award of such other and further relief as this Court deems just and proper.

**DEMAND FOR JURY TRIAL**

AmberWave hereby demands a trial by jury on any issue so triable.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

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October 17, 2006

**CERTIFICATE OF SERVICE**

I hereby certify that on November 22, 2006 I electronically filed the foregoing with the Clerk of the Court using CM/ECF, which will send notification of such filing to Josy W. Ingersoll and John W. Shaw.

I further certify that I caused copies of the foregoing document to be served on November 22, 2006 upon the following in the manner indicated:

**BY HAND**

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