

**IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

WI-LAN INC.,

Plaintiff,

v.

ACER AMERICA CORPORATION, *et al.*

Defendants.

Civil Action No. 2:07-CV-473 TJW

**MARVELL SEMICONDUCTOR, INC.'S ANSWER AND COUNTERCLAIMS IN
RESPONSE TO WI-LAN INC.'S SUPPLEMENTAL FIRST AMENDED COMPLAINT**

Defendant Marvell Semiconductor, Inc. ("Marvell") hereby submits its Answer and Counterclaims in response to the Supplemental First Amended Complaint for Patent Infringement of Plaintiff Wi-LAN Inc. ("Wi-LAN") as follows. Wi-LAN's opening paragraph does not itself appear to contain any allegations requiring a response. Marvell admits that Wi-LAN's pleading purports to be a complaint for patent infringement, but denies Marvell has infringed any valid and enforceable patent claim or that Wi-LAN is entitled to any relief. Marvell's specific responses to the numbered allegations are set forth below.

ANSWER

1. With respect to paragraph 1, on information and belief, Marvell admits that Wi-LAN is a corporation existing under the laws of Canada with its principal place of business at 11 Holland Ave., Suite 608, Ottawa, Ontario, Canada.

2. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 2, and, therefore, denies those allegations.

3. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 3, and, therefore, denies those allegations.

4. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 4, and, therefore, denies those allegations.

5. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 5, and, therefore, denies those allegations.

6. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 6, and, therefore, denies those allegations.

7. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 7, and, therefore, denies those allegations.

8. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 8, and, therefore, denies those allegations.

9. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 9, and, therefore, denies those allegations.

10. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 10, and, therefore, denies those allegations.

11. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 11, and, therefore, denies those allegations.

12. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 12, and, therefore, denies those allegations.

13. Marvell admits that it is a California Corporation with its principal place of business at 5488 Marvell Lane, Santa Clara, CA 95054-3606. Marvell also admits that it may be served with process by serving its registered agent, CT Corporation System, at 818 West Seventh

Street, Los Angeles, California 90017. Except as expressly admitted, Marvell denies the remaining allegations of paragraph 13.

JURISDICTION AND VENUE

14. These allegations set forth legal conclusions to which no response is required. Marvell admits that Wi-LAN's complaint alleges infringement under the United States patent laws. Marvell denies any remaining allegations in paragraph 14.

15. Marvell admits that this Court has subject matter jurisdiction over patent law claims. Consistent with the denial of the allegations of paragraphs 18 and 19 below, on information and belief Marvell denies that Wi-LAN has standing, and accordingly denies that this Court has subject matter jurisdiction over Wi-LAN's patent claims in this particular case and denies any allegations in this paragraph.

16. Marvell admits for purposes of this action only that this Court has personal jurisdiction as to Marvell. Except as expressly admitted, Marvell denies the remaining allegations of paragraph 16 that relate to Marvell. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 16 that relate to other defendants, and, therefore, denies those allegations.

17. Marvell admits that venue in this action is proper in the Eastern District of Texas, but as there is a previously-filed, pre-existing action involving this subject matter, Marvell denies that this venue is convenient for the parties and witnesses or an appropriate venue for resolution of this dispute, including because of the locations of witnesses and documents, and other facts, and asserts that California would be a more convenient forum for this action.

COUNT 1: PATENT INFRINGEMENT

18. Marvell admits that U.S. Patent No. 5,282,222 (“the ’222 patent”) bears an issue date of January 25, 1994, and is entitled “Method and Apparatus for Multiple Access between Transceivers in Wireless Communications Using OFDM Spread Spectrum.” Marvell denies that the ’222 patent was duly and legally issued. Marvell lacks sufficient knowledge or belief to admit or deny the remaining allegations of paragraph 18, and, therefore, denies those allegations.

19. Marvell admits that U.S. Patent No. RE37,802 (“the ’802 patent”) bears an issue date of July 23, 2002, and is entitled “Multicode Direct Sequence Spread Spectrum.” Marvell denies that the ’802 patent was duly and legally issued. Marvell lacks sufficient knowledge or belief to admit or deny the remaining allegations of paragraph 19, and, therefore, denies those allegations.

20. Marvell admits that U.S. Patent No. 6,549,759 (“the ’759 patent”) bears an issue date of April 15, 2003, and is entitled “Asymmetric Adaptive modulation in a Wireless Communication System.” Marvell denies that the ’759 patent was duly and legally issued. Marvell lacks sufficient knowledge or belief to admit or deny the remaining allegations of paragraph 20, and, therefore, denies those allegations.

21. Marvell denies the allegations of paragraph 21

22. To the extent that the allegations of paragraph 22 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 22 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

23. To the extent that the allegations of paragraph 23 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 23 relate to non-

Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

24. To the extent that the allegations of paragraph 24 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 24 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

25. To the extent that the allegations of paragraph 25 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 25 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

26. To the extent that the allegations of paragraph 26 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 26 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

27. To the extent that the allegations of paragraph 27 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 27 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

28. To the extent that the allegations of paragraph 28 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 28 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

29. To the extent that the allegations of paragraph 29 relate to Marvell products, Marvell denies those allegations. To the extent that the allegations of paragraph 29 relate to non-Marvell products, Marvell lacks sufficient knowledge or belief to admit or deny those allegations, and, therefore, denies those allegations.

30. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 30, and, therefore, denies those allegations.

31. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 31, and, therefore, denies those allegations.

32. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 32, and, therefore, denies those allegations.

33. Marvell denies the allegations in paragraph 33.

34. Marvell denies the allegations of paragraph 34 that relate to Marvell. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 34 that relate to other defendants, and, therefore, denies those allegations.

35. Marvell denies the allegations of paragraph 35 that relate to Marvell. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 35 that relate to other defendants, and, therefore, denies those allegations.

36. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 36, and, therefore, denies those allegations.

37. Marvell denies the allegations of paragraph 37 that relate to Marvell and denies causing Wi-LAN to suffer any damages. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of paragraph 37 that relate to other defendants, and, therefore, denies those allegations.

PLAINTIFF'S PRAYER FOR RELIEF

These paragraphs set forth the statement of relief requested by Wi-LAN to which no response is required. Marvell denies the allegations of Wi-LAN's Prayer for Relief against Marvell and denies that Wi-LAN is entitled to any relief whatsoever with respect to Marvell. Marvell lacks sufficient knowledge or belief to admit or deny the allegations of Wi-LAN's Prayer for Relief that relate to other defendants, and, therefore, denies those allegations.

PLAINTIFF'S DEMAND FOR JURY TRIAL

This paragraph sets forth Wi-LAN's request for a jury trial to which no response is required.

AFFIRMATIVE DEFENSES

Subject to the responses above, Marvell alleges and asserts the following defenses in response to the allegations, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein. In addition to the affirmative defenses described below, subject to their responses above, Marvell specifically reserves all rights to allege additional affirmative defenses that become known through the course of discovery.

FIRST AFFIRMATIVE DEFENSE

1. Marvell's accused products do not and have not infringed (either directly, contributorily, or by inducement) any valid and enforceable claim of the '222 patent, the '802 patent, or the '759 patent (collectively "the patents-in-suit").

SECOND AFFIRMATIVE DEFENSE

2. One or more asserted claims of the '222 patent, the '802 patent, and the '759 patent are invalid because they fail to comply with the requirements 35 U.S.C. § 100 *et seq.*, including, 101, 102, 103, 112, 132, and/or 251.

THIRD AFFIRMATIVE DEFENSE

3. The claims of the '222, '802, and '759 patents are unenforceable in whole or in part, by the doctrines of laches, unclean hands, equitable estoppel, promissory estoppel, and/or waiver.

FOURTH AFFIRMATIVE DEFENSE

4. Wi-LAN's claims are barred by the doctrine of prosecution history estoppel based on statements, representations and admissions made during prosecution of the patent applications resulting in the patents-in-suit.

FIFTH AFFIRMATIVE DEFENSE

5. Wi-LAN's claims for damages is statutorily limited by 35 U.S.C. §§ 286 and/or 287.

SIXTH AFFIRMATIVE DEFENSE

6. Wi-LAN's cannot satisfy the requirements applicable to its request for injunctive relief and has an adequate remedy at law.

SEVENTH AFFIRMATIVE DEFENSE

7. One or more of the claims of the '802 patent are barred by intervening rights.

EIGHTH AFFIRMATIVE DEFENSE

8. One or more of the claims of the '802 patent are invalid under the doctrine of recapture.

NINTH AFFIRMATIVE DEFENSE

9. Wi-LAN's claims for relief are limited by the doctrines of full compensation, exhaustion, and/or first sale, and Wi-LAN is not entitled to a double recovery.

TENTH AFFIRMATIVE DEFENSE

10. Marvell and its accused products are licensed, expressly or implicitly.

ELEVENTH AFFIRMATIVE DEFENSE

11. The claims of the '222 patent and the '802 patent are unenforceable due to fraud perpetrated by Wi-LAN.

A. The IEEE's Rules and Policies Regarding Standards

12. In this action, Wi-LAN has alleged that certain products having wireless capability compliant with the IEEE 802.11 standards infringe the patents-in-suit.

13. The IEEE is a professional association and leading developer of technical standards. IEEE members include engineers, scientists and allied professionals whose technical interests relate to electrical and computer sciences, engineering and related disciplines. Members may participate in the standards-setting process in working groups and/or subgroups called task groups.

14. To protect against unscrupulous conduct by any member who seeks to benefit unfairly from, or to manipulate to its advantage, the IEEE's standard-setting process, and to enable the IEEE and its members to develop standards free from potentially blocking patents, the IEEE instituted policies and rules regarding the disclosure and licensing of patents.

15. At all relevant times alleged herein, the IEEE's rules and policies required fairness and candor with respect to intellectual property. By way of example only, the IEEE required its members to submit letters of assurance including either a general disclaimer to the effect that the

patentee will not enforce any of its present or future patents whose use would be required to implement the proposed IEEE standard against any person or entity using the patents to comply with the standard or a statement that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination. For example, the IEEE's Standards Board Bylaws state that "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard." Additionally, the IEEE's Standards Board Bylaws further state that the assurance "shall be a letter that is in the form of either a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement the proposed IEEE standard against any person or entity using the patent(s) to comply with the standard or b) A statement that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination."

16. The IEEE formed the 802.11 working group in 1990. The IEEE 802.11 standard is entitled "Wireless LAN Media Access Control (MAC) and Physical Layer (PHY) Specifications" and concerns wireless local area networking ("wireless LAN").

17. In 1997, the IEEE formed two task groups: the 802.11a and 802.11b. The 802.11a task group was concerned with a standard for wireless LAN in the 5 GHz frequency band. The 802.11b task group was concerned with a standard for wireless LAN in the 2.4 GHz frequency band.

18. Members of the IEEE participating in the standards setting process for 802.11a and 802.11b included Wi-LAN. As a result of its membership in the IEEE, Wi-LAN agreed, both explicitly and implicitly, that it would abide by the rules and policies of the IEEE.

B. Wi-LAN's Bad Faith Misrepresentations and Omissions

19. Wi-LAN intentionally and knowingly made material misrepresentations and/or omissions in connection with standards-setting organizations, including as alleged below.

20. On July 6-11, 1998, the 802.11 working group met in La Jolla, California in connection with the standards-setting process.

21. Wi-LAN's president and CEO, Hatim Zaghloul, and Vice President of Engineering, Steven Knudsen, attended the July 1998 802.11 meeting in La Jolla.

22. Numerous proposals had been submitted to the 802.11b task group for consideration prior to the July 1998 meeting in La Jolla, including proposals from Alantro Communications ("Alantro"), Micrilor Inc. ("Micrilor"), Raytheon, KDD, Golden Bridge Technology, Harris Semiconductor ("Harris"), and Lucent Technologies ("Lucent").

23. On the first day of the 802.11 meeting, July 6, 1998, Harris and Lucent submitted a joint proposal (the "Harris/Lucent Proposal") to the 802.11b task group.

24. On July 7, 1998, Alantro, Micrilor, Harris and Lucent presented their proposals to members of the 802.11b task group.

25. On July 7, 1998, Wi-LAN submitted a letter to the chairman of the 802.11 working group offering to license its patents on fair, reasonable and non-discriminatory terms and conditions with respect to 802.11b.

26. On July 9, 1998, the 802.11b task group voted in favor of pursuing the Harris/Lucent Proposal, and decided not to pursue other proposals. For example, the 802.11b

task group also considered proposals submitted by Alantro and Micrilor. The task group could have decided not to pursue any of the pending proposals.

27. After the 802.11b task group voted to pursue the Harris/Lucent Proposal, it then recommended the Harris/Lucent Proposal to the 802.11 working group as the base for the 802.11b standard. The 802.11 working group accepted the 802.11b task group's recommendation.

28. The IEEE 802.11 working group met again in September 1998 in Westford, Massachusetts.

29. On September 10, 1998, four days before the September 1998 802.11 meeting, Wi-LAN filed an application to reissue U.S. Patent No. 5,555,268 (the '268 patent"). This patent application (hereinafter, the "Reissue Application") later issued as the '802 patent. In prosecuting the Reissue Application, Wi-LAN submitted claims which Wi-LAN alleges are infringed by certain products having wireless capability compliant with the IEEE 802.11 standards.

30. On September 14, 1998, after filing the Reissue Application, Wi-LAN submitted a letter to the chairman of the 802.11 working group stating that Wi-LAN believed that the then-pending Reissue Application was not necessary to the practice of 802.11b. Wi-LAN's letter states that "Wi-LAN Inc. hereby withdraws its previous IP statement dated July 9, 1998 to the extent that it implied that Wi-LAN existing US patent on multicode technology, US patent # 5,555,268, or another pending patent are necessary for the implementation of devices incorporating the IEEE 802.11b draft standard."

31. The IEEE 802.11 working group met again in November 1998 in Albuquerque, New Mexico. Wi-LAN's president and CEO, Mr. Zaghoul, and Vice President of Engineering,

Mr. Knudsen, attended the November 1998 meeting in Albuquerque, New Mexico. In particular, Mr. Zaghoul attended a meeting of the 802.11b task group at the November 1998 Albuquerque 802.11 meeting. With Mr. Zaghoul in attendance at that meeting, the 802.11b task group addressed Wi-LAN's September 14, 1998 letter. At the meeting, Wi-LAN continued to represent that it believed that the Reissue Application was not necessary to the practice of 802.11b. The meeting minutes for the 802.11b task group state "270 - rl WLAN IP statement (They no longer feel that they have any IP related to standard)." Based on Wi-LAN's assertions, the 802.11b task group confirmed that it "no longer feel[s] that WiLAN IP position applies to the proposed 802.11b standard."

32. At all relevant times, Wi-LAN intentionally and in bad faith failed to inform the IEEE that Wi-LAN had filed the Reissue Application or of its contents, or that Wi-LAN intended to assert its patents in bad faith against the 802.11b standard, without offering licenses on fair, reasonable and non-discriminatory terms.

C. Wi-LAN's Letters of Assurance Regarding 802.11a and 802.11g

33. On July 7, 1998, Wi-LAN submitted a letter to the chair of the IEEE 802.11 working group referencing the "Standards Recommendation Relating to Technology Being Proposed by Lucent Technologies and NTT for Inclusion in the IEEE P802.11a (OFDM) Standards Project" in the subject line and confirming that it was "prepared to license its existing patents directed to and necessary for the practice of the referenced OFDM Technology, if Lucent and NTT's proposal is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions." The 802.11 working group adopted the referenced proposal.

34. On November 9, 1998, Wi-LAN submitted a letter of assurance referencing the "Standards Recommendation Relating to the IEEE P802.11a (OFDM) Draft Standards" in the

subject line and confirming that it was "prepared to license its existing and future patents directed to and necessary for the practice of the referenced OFDM Technology, if the IEEE802.11a Draft Standard is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions." The 802.11 working group adopted the referenced standard.

35. On November 29, 2000, Wi-LAN submitted a letter of assurance referencing the "Standards Recommendation Relating to the IEEE P802.11b Task Group G (OFDM) Draft Standards" in the subject line and confirming that it was "prepared to license its existing and future patents directed to and necessary for the practice of the referenced OFDM Technology, if the IEEE 802.11b Task Group G Draft Standard is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions."

36. Wi-LAN, intentionally and in bad faith, failed to offer licenses on fair, reasonable and non-discriminatory terms, and instead is pursuing excessive royalties and injunctive relief in litigation.

37. Wi-LAN intentionally and knowingly made material misrepresentations and/or omissions to the IEEE, its members, others relying on 802.11 including defendants in this action, and the public, including, as alleged herein, misrepresentations and/or omissions regarding its alleged patents and/or patent applications. Wi-LAN had a duty to disclose facts regarding its alleged intellectual property, including as a result of its representations to the IEEE, as alleged herein.

38. Wi-LAN's misrepresentations and/or omissions were knowingly false and made in bad faith with the intent to induce reliance.

39. The IEEE and its members, including Marvell, reasonably relied on the foregoing misrepresentations and/or omissions in adopting the 802.11 standards. Marvell further relied on

the foregoing misrepresentations and/or omissions, and/or the 802.11 standards, in investing substantial resources developing and marketing products accused of alleged infringement in this action.

40. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage Marvell. Wi-LAN's conduct was malicious and willful, and Marvell is entitled to punitive damages.

TWELFTH AFFIRMATIVE DEFENSE

41. Marvell incorporates and re-alleges paragraphs 1 through 40 above as if set forth fully herein.

42. Individuals subject to the duty of candor under 37 CFR 1.56 ("Applicants") engaged in inequitable conduct by withholding or misstating material information with intent to deceive the USPTO in connection with prosecuting the '759 patent, rendering the '759 patent unenforceable.

43. During prosecution of the '759 patent, Applicants were aware of prior art that they knew was material to patentability, including prior public disclosures material to patentability that they deliberately failed to properly disclose to the USPTO with intent to deceive.

44. For example, on or around July 7, 2000, a document entitled "Media Access Control Layer Proposal for the 802.16.1 Air Interface Specification" was submitted to the 802.16 MAC Subgroup by Glen Sater, of Motorola, and Kenneth L. Stanwood, of Ensemble Corporation. Kenneth L. Stanwood is a named inventor on the '759 patent.

45. Applicants' public disclosures, including those described above, were material to the patentability of the application that issued as the '759 patent. During prosecution of the

application that issued as the '759 patent, with intent to deceive the USPTO, the applicants intentionally failed to disclose these public disclosures to the USPTO. Under Wi-LAN's improper and incorrect applications of the '759 patent's claims, these disclosures constitute prior art that renders the claims of the '759 patent invalid under 35 U.S.C. §§ 102 and/or 103.

46. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

47. This is an exceptional case under 35 U.S.C. § 285 including without limitation because Wi-LAN filed its Complaint with knowledge of the facts stated in this Defense.

MARVELL'S COUNTERCLAIM FOR DECLARATORY RELIEF

Marvell, for its Counterclaims against Wi-LAN and upon information and belief, states as follows:

PARTIES

1. Marvell is California corporation, with its principal place of business located at 5488 Marvell Lane, Santa Clara, CA 95054.

2. On information and belief, Wi-LAN is a corporation existing under the laws of Canada, with its principal place of business at 11 Holland Ave., Suite 608, Ottawa, Ontario, Canada.

JURISDICTION AND VENUE

3. Subject to Marvell's affirmative defenses and denials, including those concerning Wi-LAN's lack of standing, Marvell alleges that this Court has jurisdiction over the subject matter of these Counterclaims under the 28 U.S.C. §§ 1331, 1338(a), 1367, 2201 *et seq.*, and 35 U.S.C. § 101 *et seq.*

4. This Court also has personal jurisdiction over Wi-LAN because, among other reasons, Wi-LAN submitted itself to the jurisdiction of this Court by bringing its complaint for infringement of the patents-in-suit in this Court.

COUNT I:

DECLARATORY RELIEF REGARDING NON-INFRINGEMENT

5. Marvell repeats and re-alleges paragraphs 1 through 4 above as if fully set forth herein.

6. Marvell has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '222, '802, and '759 patents.

7. An actual and justiciable case or controversy exists between Marvell and Wi-LAN as to the non-infringement of the '222, '802, and '759 patents, as evidenced by Wi-LAN's Supplemental First Amended Complaint and Marvell's Answer to that Complaint, set forth above.

8. A judicial declaration is necessary and appropriate so that Marvell may ascertain its rights regarding the '222, '802, and '759 patents.

9. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Marvell requests a declaration of the Court that Marvell's accused products do not infringe and have not infringed, directly or indirectly, any valid and enforceable claim of the '222, '802, and '759 patents.

10. This is an exceptional case under 35 U.S.C. § 285 including without limitation because Wi-LAN filed its Complaint with knowledge of the facts stated in this Counterclaim.

COUNT II:

DECLARATORY RELIEF REGARDING INVALIDITY

11. Marvell repeats and re-alleges paragraphs 1 through 10 above as if fully set forth herein.

12. The '222,'802, and '759 patents are invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more of 35 U.S.C. §§ 100 *et seq.*, 101, 102, 103, 112, 132, and 251.

13. An actual and justiciable case or controversy exists between Marvell and Wi-LAN as to the invalidity of the '222, '802, and '759 patents, as evidenced by Wi-LAN's Supplemental First Amended Complaint and Marvell's Answer to that Complaint, set forth above.

14. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Marvell requests a declaration of the Court that the '222, '802, and '759 patents are invalid.

15. This is an exceptional case under 35 U.S.C. § 285 including without limitation because Wi-LAN filed its Complaint with knowledge of the facts stated in this Counterclaim.

COUNT III:

FRAUD

16. Marvell repeats and re-alleges paragraphs 1 through 15 above as if fully set forth herein.

A. The IEEE's Rules and Policies Regarding Standards

17. In this action, Wi-LAN has alleged that certain products having wireless capability compliant with the IEEE 802.11 standards infringe the patents-in-suit.

18. The IEEE is a professional association and leading developer of technical standards. IEEE members include engineers, scientists and allied professionals whose technical interests relate to electrical and computer sciences, engineering and related disciplines. Members

may participate in the standards-setting process in working groups and/or subgroups called task groups.

19. To protect against unscrupulous conduct by any member who seeks to benefit unfairly from, or to manipulate to its advantage, the IEEE's standard-setting process, and to enable the IEEE and its members to develop standards free from potentially blocking patents, the IEEE instituted policies and rules regarding the disclosure and licensing of patents.

20. At all relevant times alleged herein, the IEEE's rules and policies required fairness and candor with respect to intellectual property. By way of example only, the IEEE required its members to submit letters of assurance including either a general disclaimer to the effect that the patentee will not enforce any of its present or future patents whose use would be required to implement the proposed IEEE standard against any person or entity using the patents to comply with the standard or a statement that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination. For example, the IEEE's Standards Board Bylaws state that "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard." Additionally, the IEEE's Standards Board Bylaws further state that the assurance "shall be a letter that is in the form of either a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement the proposed IEEE standard against any person or entity using the patent(s) to comply with the standard or b) A statement that a license will be made available to all applicants without

compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination."

21. The IEEE formed the 802.11 working group in 1990. The IEEE 802.11 standard is entitled "Wireless LAN Media Access Control (MAC) and Physical Layer (PHY) Specifications" and concerns wireless local area networking ("wireless LAN").

22. In 1997, the IEEE formed two task groups: the 802.11a and 802.11b. The 802.11a task group was concerned with a standard for wireless LAN in the 5 GHz frequency band. The 802.11b task group was concerned with a standard for wireless LAN in the 2.4 GHz frequency band.

23. Members of the IEEE participating in the standards setting process for 802.11a and 802.11b included Wi-LAN. As a result of its membership in the IEEE, Wi-LAN agreed, both explicitly and implicitly, that it would abide by the rules and policies of the IEEE.

B. Wi-LAN's Bad Faith Misrepresentations and Omissions

24. Wi-LAN intentionally and knowingly made material misrepresentations and/or omissions in connection with standards-setting organizations, including as alleged below.

25. On July 6-11, 1998, the 802.11 working group met in La Jolla, California in connection with the standards-setting process.

26. Wi-LAN's president and CEO, Hatim Zaghoul, and Vice President of Engineering, Steven Knudsen, attended the July 1998 802.11 meeting in La Jolla.

27. Numerous proposals had been submitted to the 802.11b task group for consideration prior to the July 1998 meeting in La Jolla, including proposals from Alantro Communications ("Alantro"), Micrilor Inc. ("Micrilor"), Raytheon, KDD, Golden Bridge Technology, Harris Semiconductor ("Harris"), and Lucent Technologies ("Lucent").

28. On the first day of the 802.11 meeting, July 6, 1998, Harris and Lucent submitted a joint proposal (the "Harris/Lucent Proposal") to the 802.11b task group.

29. On July 7, 1998, Alantro, Micrilor, Harris and Lucent presented their proposals to members of the 802.11b task group.

30. On July 7, 1998, Wi-LAN submitted a letter to the chairman of the 802.11 working group offering to license its patents on fair, reasonable and non-discriminatory terms and conditions with respect to 802.11b.

31. On July 9, 1998, the 802.11b task group voted in favor of pursuing the Harris/Lucent Proposal, and decided not to pursue other proposals. For example, the 802.11b task group also considered proposals submitted by Alantro and Micrilor. The task group could have decided not to pursue any of the pending proposals.

32. After the 802.11b task group voted to pursue the Harris/Lucent Proposal, it then recommended the Harris/Lucent Proposal to the 802.11 working group as the base for the 802.11b standard. The 802.11 working group accepted the 802.11b task group's recommendation.

33. The IEEE 802.11 working group met again in September 1998 in Westford, Massachusetts.

34. On September 10, 1998, four days before the September 1998 802.11 meeting, Wi-LAN filed an application to reissue U.S. Patent No. 5,555,268 (the '268 patent"). This patent application (hereinafter, the "Reissue Application") later issued as the '802 patent. In prosecuting the Reissue Application, Wi-LAN submitted claims which Wi-LAN alleges are infringed by certain products having wireless capability compliant with the IEEE 802.11 standards.

35. On September 14, 1998, after filing the Reissue Application, Wi-LAN submitted a letter to the chairman of the 802.11 working group stating that Wi-LAN believed that the then-pending Reissue Application was not necessary to the practice of 802.11b. Wi-LAN's letter states that "Wi-LAN Inc. hereby withdraws its previous IP statement dated July 9, 1998 to the extent that it implied that Wi-LAN existing US patent on multicode technology, US patent # 5,555,268, or another pending patent are necessary for the implementation of devices incorporating the IEEE 802.11b draft standard."

36. The IEEE 802.11 working group met again in November 1998 in Albuquerque, New Mexico. Wi-LAN's president and CEO, Mr. Zaghoul, and Vice President of Engineering, Mr. Knudsen, attended the November 1998 meeting in Albuquerque, New Mexico. In particular, Mr. Zaghoul attended a meeting of the 802.11b task group at the November 1998 Albuquerque 802.11 meeting. With Mr. Zaghoul in attendance at that meeting, the 802.11b task group addressed Wi-LAN's September 14, 1998 letter. At the meeting, Wi-LAN continued to represent that it believed that the Reissue Application was not necessary to the practice of 802.11b. The meeting minutes for the 802.11b task group state "270 - rl WLAN IP statement (They no longer feel that they have any IP related to standard)." Based on Wi-LAN's assertions, the 802.11b task group confirmed that it "no longer feel[s] that WiLAN IP position applies to the proposed 802.11b standard."

37. At all relevant times, Wi-LAN intentionally and in bad faith failed to inform the IEEE that Wi-LAN had filed the Reissue Application or of its contents, or that Wi-LAN intended to assert its patents in bad faith against the 802.11b standard, without offering licenses on fair, reasonable and non-discriminatory terms.

C. Wi-LAN's Letters of Assurance Regarding 802.11a and 802.11g

38. On July 7, 1998, Wi-LAN submitted a letter to the chair of the IEEE 802.11 working group referencing the "Standards Recommendation Relating to Technology Being Proposed by Lucent Technologies and NTT for Inclusion in the IEEE P802.11a (OFDM) Standards Project" in the subject line and confirming that it was "prepared to license its existing patents directed to and necessary for the practice of the referenced OFDM Technology, if Lucent and NTT's proposal is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions." The 802.11 working group adopted the referenced proposal.

39. On November 9, 1998, Wi-LAN submitted a letter of assurance referencing the "Standards Recommendation Relating to the IEEE P802.11a (OFDM) Draft Standards" in the subject line and confirming that it was "prepared to license its existing and future patents directed to and necessary for the practice of the referenced OFDM Technology, if the IEEE802.11a Draft Standard is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions." The 802.11 working group adopted the referenced standard.

40. On November 29, 2000, Wi-LAN submitted a letter of assurance referencing the "Standards Recommendation Relating to the IEEE P802.11b Task Group G (OFDM) Draft Standards" in the subject line and confirming that it was "prepared to license its existing and future patents directed to and necessary for the practice of the referenced OFDM Technology, if the IEEE 802.11b Task Group G Draft Standard is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions."

41. Wi-LAN, intentionally and in bad faith, failed to offer licenses on fair, reasonable and non-discriminatory terms, and instead is pursuing excessive royalties and injunctive relief in litigation.

42. Wi-LAN intentionally and knowingly made material misrepresentations and/or omissions to the IEEE, its members, others relying on 802.11 including defendants in this action, and the public, including, as alleged herein, misrepresentations and/or omissions regarding its alleged patents and/or patent applications. Wi-LAN had a duty to disclose facts regarding its alleged intellectual property, including as a result of its representations to the IEEE, as alleged herein.

43. Wi-LAN's misrepresentations and/or omissions were knowingly false and made in bad faith with the intent to induce reliance.

44. The IEEE and its members, including Marvell, reasonably relied on the foregoing misrepresentations and/or omissions in adopting the 802.11 standards. Marvell further relied on the foregoing misrepresentations and/or omissions, and/or the 802.11 standards, in investing substantial resources developing and marketing products accused of alleged infringement in this action.

45. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage Marvell. Wi-LAN's conduct was malicious and willful, and Marvell is entitled to punitive damages.

COUNT IV

Constructive Fraud

46. Marvell incorporates and re-alleges paragraphs 1 through 45 above as if set forth fully herein.

47. Wi-LAN intentionally and knowingly made material misrepresentations and/or omissions to the IEEE, including, as alleged herein, misrepresentations and/or omissions regarding its alleged patents and/or patent applications. Wi-LAN had a duty to disclose facts

regarding its alleged intellectual property, including as a result of its representations to the IEEE, as alleged herein.

48. Wi-LAN's misrepresentations and/or omissions were knowingly false and made in bad faith with the intent to induce reliance.

49. The IEEE and its members, including Marvell, reasonably relied on the foregoing misrepresentations and/or omissions in adopting 802.11 standards. Marvell further relied on the foregoing misrepresentations and/or omissions, and/or the 802.11 standards, in investing substantial resources developing and marketing products accused of alleged infringement in this action.

50. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage Marvell. Wi-LAN's conduct was malicious and willful, and Marvell is entitled to punitive damages.

COUNT V

Negligent Misrepresentation

51. Marvell incorporates and re-alleges paragraphs 1 through 50 above as if set forth fully herein.

52. Wi-LAN made material misrepresentations and/or omissions without reasonable belief as to their truth, including, as alleged herein, misrepresentations and/or omissions regarding its alleged patents and/or patent applications. Wi-LAN had a duty to disclose facts regarding its alleged intellectual property, including as a result of its representations to the IEEE, as alleged herein.

53. Wi-LAN's misrepresentations and/or omissions were false and made with the intent to induce reliance.

54. The IEEE and its members, including Marvell, reasonably relied on the foregoing misrepresentations and/or omissions in adopting 802.11 standards. Marvell further relied on the foregoing misrepresentations and/or omissions, and/or the 802.11 standards, in investing substantial resources developing and marketing products accused of alleged infringement in this action.

55. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage Marvell.

COUNT VI

Promissory Estoppel

56. Marvell incorporates and re-alleges paragraphs 1 through 55 above as if set forth fully herein.

57. Wi-LAN made representations and engaged in other conduct, including Wi-LANs representations that it did not have intellectual property necessary to practice 802.11b, and that it would license its existing and future patents relating to 802.11 on fair, reasonable and non-discriminatory terms and conditions.

58. Wi-LAN's representations and other conduct constituted promises to the IEEE and its members, including Marvell. By making those promises, Wi-LAN knew or reasonably should have known that they would be relied upon.

59. The IEEE and its members, including Marvell, reasonably relied on the foregoing promises in adopting 802.11 standards. Marvell further reasonably relied on the foregoing promises, and/or the 802.11 standards, in investing substantial resources developing and marketing products accused of alleged infringement in this action.

60. Marvell has been damaged as a result of its reasonable reliance as alleged herein, in developing and marketing products that have been accused by Wi-LAN of alleged infringement. Injustice can be avoided only by enforcement of Wi-LANs promises.

COUNT VII

Breach of Contract

61. Marvell incorporates and re-alleges paragraphs 1 through 60 above as if set forth fully herein.

62. For consideration, including IEEE membership and participation, Wi-LAN entered into an express and/or implied contract with the IEEE's members, or alternatively, with the IEEE to which IEEE members and others are third-party beneficiaries, in which Wi-LAN agreed, among other things, to abide by the IEEE's policies and rules. The IEEE rules and policies, whether formal or informal, including all stipulations, requirements and representations in any form, constitute a contract between Wi-LAN and the IEEE's members, or alternatively between Wi-LAN and the IEEE, to which IEEE members and others are third-party beneficiaries.

63. In accordance with the foregoing, the IEEE's rules and policies require its members to submit letters of assurance including either a general disclaimer to the effect that the patentee will not enforce any of its present or future patents whose use would be required to implement the proposed IEEE standard against any person or entity using the patents to comply with the standard or a statements that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

64. Furthermore, Wi-LANs representations and other conduct, including the letters of assurance offering licenses on fair, reasonable and non-discriminatory terms, created express

and/or implied contracts with the IEEE and its members, or alternatively between Wi-LAN and the IEEE, to which IEEE members and others are third-party beneficiaries.

65. Wi-LAN breached its contractual obligations, including by failing to offer licenses for the '802 and '222 patents on fair, reasonable and non-discriminatory terms, by seeking to enjoin Marvell from making and selling 802.11 compliant products, and through misrepresentations and/or omissions regarding its patents and/or patent applications.

66. Marvell has incurred damages, and will be further damaged in the future due to Wi-LAN's breach of its contractual obligations.

COUNT VIII

Inequitable Conduct

67. Marvell incorporates and re-alleges paragraphs 1 through 66 above as if set forth fully herein.

68. Individuals subject to the duty of candor under 37 CFR 1.56 ("Applicants") engaged in inequitable conduct by withholding or misstating material information with intent to deceive the USPTO in connection with prosecuting the '759 patent, rendering the '759 patent unenforceable.

69. During prosecution of the '759 patent, Applicants were aware of prior art that they knew was material to patentability, including prior public disclosures material to patentability that they deliberately failed to properly disclose to the USPTO with intent to deceive.

70. For example, on or around July 7, 2000, a document entitled "Media Access Control Layer Proposal for the 802.16.1 Air Interface Specification" was submitted to the 802.16 MAC Subgroup by Glen Sater, of Motorola, and Kenneth L. Stanwood, of Ensemble Corporation. Kenneth L. Stanwood is a named inventor on the '759 patent.

71. Applicants' public disclosures, including those described above, were material to the patentability of the application that issued as the '759 patent. During prosecution of the application that issued as the '759 patent, with intent to deceive the USPTO, the applicants intentionally failed to disclose these public disclosures to the USPTO. Under Wi-LAN's improper and incorrect applications of the '759 patent's claims, these disclosures constitute prior art that renders the claims of the '759 patent invalid under 35 U.S.C. §§ 102 and/or 103.

72. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

73. This is an exceptional case under 35 U.S.C. § 285 including without limitation because Wi-LAN filed its Complaint with knowledge of the facts stated in this Defense.

COUNT IX

Unclean Hands

74. Marvell incorporates and re-alleges paragraphs 1 through 66 above as if set forth fully herein.

75. Wi-LAN's wrongful conduct as alleged herein constitutes unclean hands and renders the patents-in-suit unenforceable.

COUNT X

Waiver

76. Marvell incorporates and re-alleges paragraphs 1 through 68 above as if set forth fully herein.

77. Wi-LAN's wrongful conduct as alleged herein constitutes a waiver and renders the patents-in-suit unenforceable and/or prevents injunctive relief.

PRAYER FOR RELIEF

WHEREFORE, Marvell prays for judgment as follows:

- a. That Wi-LAN take nothing by its Complaint;
- b. That Wi-LAN's Complaint be dismissed with prejudice;
- c. That the Court enter a declaration that Marvell's accused products do not infringe and have not infringed, directly or indirectly, any valid and enforceable claim of the '222 patent or the '802 patent;
- d. That the Court declare that the '222 patent and the '802 patent are invalid;
- e. That Marvell be awarded the amount of damages proven at trial, including punitive damages;
- f. That this case be declared exceptional and Marvell be awarded its costs, expenses and reasonable attorney fees in this action pursuant 35 U.S.C. § 285;
- g. That Wi-LAN be limited or barred from enforcing the '222 patent and the '802 patent in equity;
- h. That Wi-LAN be ordered to specifically perform its contract with IEEE and/or IEEE members to grant licenses to Marvell on fair, reasonable, and non-discriminatory terms and conditions;
- i. That Marvell be declared to have a royalty-free license for the '222 patent and the '802 patent; and
- j. That Marvell be awarded such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Defendant Marvell Semiconductor, Inc. hereby demands a jury trial as to all issues triable by jury.

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic service are being served with a copy of this MARVELL SEMICONDUCTOR, INC.'S ANSWER AND COUNTERCLAIMS IN RESPONSE TO WILAN INC.'S SUPPLEMENTAL FIRST AMENDED COMPLAINT via the Court's CM/ECF system per Local Rule CV-5(a)(3). Any other counsel of record will be served by first class U.S. mail on this same date.

/s/ **LouisCampbell**

Louis Campbell