

2. The allegations of Paragraph 2 are not directed to LGEMU. LGEMU is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2 and therefore denies them.

3. The allegations of Paragraph 3 are not directed to LGEMU. LGEMU is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3 and therefore denies them.

4. LGEMU admits that it is a California corporation with its principal place of business at 10101 Old Grove Road, San Diego, California 92131. LGEMU admits that LG Electronics, Inc., is a corporation organized and existing under the laws of South Korea, with its principal place of business at LG Twin Towers, 20, Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Korea. With respect to the third sentence of Paragraph 4, LGEMU admits that it sells mobile handsets with CDMA2000 and/or 802.11 functionality. Wi-LAN's complaint does not define terms necessary to understand the allegations of the third sentence of Paragraph 4, and, in light of the ambiguity of such terms, LGEMU lacks knowledge or information sufficient to form a belief as to the truth of the allegations and therefore denies them. LGEMU denies that LGEMU and LG Electronics, Inc., are commonly owned by the same corporate entity and are alter egos and/or agents of one another. LGEMU admits that it and LG Electronics, Inc., may be served with process by serving their registered service agent, Alan K. Tse, 10101 Old Grove Road, San Diego, California 92131. LGEMU denies the remaining allegations of Paragraph 4.

5. The allegations of Paragraph 5 are not directed to LGEMU. LGEMU is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 5 and therefore denies them.

JURISDICTION AND VENUE

6. These allegations set forth legal conclusions to which no response is required. LGEMU admits that Wi-LAN's complaint alleges infringement under the United States patent laws. LGEMU denies any infringement and any remaining allegations in Paragraph 6.

7. LGEMU admits that this Court has subject matter jurisdiction over patent law claims. In view of the denial of the allegations of Paragraphs 10 and 12 below, on information and belief, LGEMU 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.

8. LGEMU admits that this Court has personal jurisdiction over it in this particular action, and that it has conducted business in the State of Texas. LGEMU admits that it has sold its products in the United States, the State of Texas, and the Eastern District of Texas. To the extent the remaining allegations of Paragraph 8 are directed at LGEMU, they are denied. To the extent the allegations of Paragraph 8 are directed to other entities, LGEMU lacks sufficient information to admit or deny the allegations of Paragraph 8 and therefore denies them.

9. LGEMU admits that venue is proper in the Eastern District of Texas for purposes of this particular action.

COUNT 1: PATENT INFRINGEMENT

10. With respect to the first sentence of Paragraph 10, LGEMU admits that U.S. Reissued Patent No. RE37,802 (the "'802 patent'") is entitled "Multicode Direct Sequence Spread Spectrum," and that the '802 patent bears a date of reissue of July 23, 2002. On information and belief, LGEMU denies the remaining allegations of the first sentence of Paragraph 10. With respect to the second sentence of Paragraph 10, LGEMU is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 10 and therefore denies them.

11. Denied.

12. With respect to the first sentence of Paragraph 12, LGEMU admits that U.S. Patent No. 5,282,222 (the “‘222 patent”) is entitled “Method and Apparatus for Multiple Access Between Transceivers in Wireless Communications Using OFDM Spread Spectrum,” and that the ‘222 patent bears a date of issue of January 25, 1994. On information and belief, LGEMU denies the remaining allegations of the first sentence of Paragraph 12. With respect to the second sentence of Paragraph 12, LGEMU is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 12 and therefore denies them.

13. Denied.

14. Denied.

15. Denied.

16. Denied.

17. Denied.

18. Denied.

19. Denied.

20. Denied.

21. Denied.

22. Denied.

23. Denied.

24. Denied.

25. Denied.

PRAYER FOR RELIEF

These paragraphs set forth the statement of relief requested by Wi-LAN to which no response is required. LGEMU denies that Wi-LAN is entitled to any of the requested relief and denies any allegations.

DEMAND FOR JURY TRIAL

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

DEFENSES AND AFFIRMATIVE DEFENSES

1. Wi-LAN has failed to state a claim upon which relief can be granted.
2. LGEMU does not infringe and has not infringed – not by direct infringement, contributory infringement, or inducement of infringement – any valid claim of the '222 and '802 patents.
3. One or more claims of the '222 and '802 patents are invalid for failure to satisfy the requirements of one or more of 35 U.S.C. §§ 100 et seq., 101, 102, 103, 112, 132, and 251.
4. By reason of the proceedings in the United States Patent and Trademark Office during prosecution of the applications that led to the '222 and '802 patents, Wi-LAN is estopped from claiming infringement, either literally or under the doctrine of equivalents, by LGEMU of one or more claims of the '222 and '802 patents.
5. Wi-LAN's claims are barred, in whole or in part, by waiver, implied waiver, laches, equitable estoppel, and/or acquiescence.
6. Wi-LAN's claims are barred, in whole or in part, by promissory estoppel
7. Wi-LAN's claims are barred, in whole or in part, by unclean hands as specifically alleged below in LGEMU's Twelfth Counterclaim, which is fully incorporated by reference.

8. The claims of the '222 and '802 patents are unenforceable due to inequitable conduct as specifically alleged below in LGEMU's Third and Sixth Counterclaims, which are fully incorporated by reference.

9. LGEMU and its accused products are licensed, expressly or implicitly.

10. Wi-LAN is not entitled to injunctive relief at least because any alleged injury is not immediate or irreparable, and because Wi-LAN has an adequate remedy at law.

11. Wi-LAN's claim for damages are limited under 35 U.S.C. §§ 286 and 287.

12. Wi-LAN's claims relating to the '802 patent are barred by intervening rights.

13. Wi-LAN's claims relating to the '802 patent are barred by the doctrine of recapture.

14. 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 multiple recoveries.

COUNTERCLAIMS

For its Counterclaims against plaintiff Wi-LAN, defendant LGEMU avers as follows:

THE PARTIES

1. LGEMU is a corporation organized and existing under the laws of California and has its principal place of business at 10101 Old Grove Road, San Diego, California 92131.

2. Wi-LAN states in its complaint that it 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. These Counterclaims arise under 28 U.S.C. §§ 2201 and 2202 and the patent laws set forth in Title 35 of the United States Code.

4. Wi-LAN alleges in its complaint that LGEMU has been and is now infringing the '802 and '222 patents.

5. Wi-LAN alleges in its complaint that it is the assignee of all rights, title, and interest in and to the '802 and '222 patents and that it possesses all rights of recovery including the right to recover damages for past infringement.

6. The '802 and '222 patents are invalid and/or are not and have not been infringed by LGEMU, directly or indirectly. Additionally, Wi-LAN has engaged in misconduct rendering the '802 and '222 patents unenforceable.

7. Consequently, there is an actual case or controversy between the parties concerning the non-infringement, invalidity, and/or unenforceability of the '802 and '222 patents.

8. Subject to LGEMU's denials, defenses, and affirmative defenses, subject matter jurisdiction for these counterclaims exists pursuant to 28 U.S.C. §§ 1331, 1332, and 1338(a).

9. This Court has personal jurisdiction over Wi-LAN.

10. Venue is proper in the Eastern District of Texas pursuant to 28 U.S.C. §§ 1391 and 1400.

COUNT ONE

Declaratory Judgment of Non-Infringement of U.S. Patent No. RE37,802

11. LGEMU restates and incorporates by reference its allegations in Paragraphs 1 through 10 of its Counterclaims.

12. Wi-LAN alleges that LGEMU has been and is now infringing, directly and/or indirectly, the '802 patent.

13. LGEMU has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '802 patent.

14. An actual controversy exists between LGEMU and Wi-LAN as to whether the '802 patent is not infringed by LGEMU.

15. A judicial declaration is necessary and appropriate so that LGEMU may ascertain its rights regarding the '802 patent.

COUNT TWO

Declaratory Judgment of Invalidity of U.S. Patent No. RE37,802

16. LGEMU restates and incorporates by reference its allegations in Paragraphs 1 through 15 of its Counterclaims.

17. Wi-LAN alleges that LGEMU has been and is now infringing, directly and/or indirectly, the '802 patent.

18. One or more claims of the '802 patent are invalid for failure to satisfy the requirements of one or more of 35 U.S.C. §§ 100 et seq., 101, 102, 103, 112, 132, and 251.

19. An actual case or controversy exists between LGEMU and Wi-LAN as to whether the '802 patent is invalid.

20. A judicial declaration is necessary and appropriate so that LGEMU may ascertain whether the '802 patent is invalid.

COUNT THREE

Declaratory Judgment of Unenforceability of U.S. Patent No. RE37,802

21. LGEMU restates and incorporates by reference its allegations in paragraphs 1 through 20 of its Counterclaims.

22. On information and belief, individuals subject to the duty of candor under 37 C.F.R. § 1.56 ("Applicants"), including without limitation listed inventors Michel Fattouche ("Fattouche") and Hatim Zaghoul ("Zaghoul") and counsel, engaged in inequitable conduct by withholding material information with the intent to deceive the United States Patent and

Trademark Office (“USPTO”) in connection with prosecuting U.S. Patent No. RE 37,802 (“the ‘802 patent”), which is a reissue of U.S. Patent No. 5,555,268 (“the ‘268 patent”). The ‘802 and ‘268 patents share the same specification.

23. Prior to the issuance of the ‘268 patent, Applicants became aware of prior art material to the patentability of the ‘268 and ‘802 patents, including at least Leonard J. Cimini, “Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing,” IEEE Transactions on Communications, Vol. Com-33, No. 7 (July 1985) (“Cimini”); United States Patent No. 5,063,560 (“Yerbury”); John A. C. Bingham “Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come,” IEEE Communications (May 1990) (“Bingham”) and other publications and patents by John A. C. Bingham; and B. Hirosaki, A. Yoshida, O. Tanaka, S. Hasegawa, K. Inoue, and K. Watanabe, “A 19.2 Kbps voiceband data modem based on orthogonally multiplexed QAM technique,” IEEE (1985) (“Hirosaki”). Prior to the issuance of the ‘802 patent, Applicants became aware of prior art that is material to the patentability of the ‘802 patent, including at least U.S. Patent No. 4,583,236 (“Kromer”); U.S. Patent No. 4,665,404 (“Christy”); U.S. Patent No. 5,430,759 (“Yokey”); Bruce Carlson, Communication Systems: An Introduction to Signals and Noise in Electrical Communication (3d ed. McGraw-Hill 1986) (“Carlson”); and Jinkang Zhu, Shigenobu Sasaki, and Gen Marubayashi, “Proposal of Parallel Combinatory Spread Spectrum Communication System,” Transactions of the Institute of Electronics, Information and Communication Engineers, Vol. J74-B-II No. 5 (May 1991) (“Zhu”).

24. For example, Fattouche and Zaghoul were aware of Cimini at least by August 10, 1992, when they listed the article in an Information Disclosure Statement submitted to the USPTO during the prosecution of the ‘222 patent. Additionally, Fattouche and Zaghoul were

aware of Yerbury in December 1992 when the Examiner cited Yerbury during the prosecution of the '222 patent. On information and belief, the Bingham article was one of the papers that Fattouche and Zaghoul used prior to filing of the application for the '268 patent. As a further example, Fattouche and Zaghoul were aware of the Hirosaki article at least by August 10, 1992, when they listed the article in an Information Disclosure Statement submitted to the USPTO during the prosecution of the '222 patent. For example, Kromer was cited in an Office Action rejection during prosecution of U.S. Patent No. 5,127,024 ("the '024 patent"). Additionally, Fattouche and Zaghoul listed the Christy abstract in an Information Disclosure Statement submitted to the USPTO during prosecution of U.S. Patent No. 5,890,068 ("the '068 patent"). As a further example, Fattouche cited Yokey in an Information Disclosure Statement submitted to the USPTO during prosecution of U.S. Patent No. 5,887,022 ("the '022 patent"). Fattouche also published a 1989 paper, "An Adaptive Minimum Redundancy Array for Digital Communications," in which the Carlson reference was cited.

25. Under Wi-LAN's improper assertions of infringement and improper application of the claims, Cimini is at least material to the patentability of at least independent claims 1, 17, and 23 of the '268 patent and claims that depend from those claims. For example, figure 1(a) of Cimini, described in Part II.A, shows that a serial stream of data can be input to a serial-to-parallel converter to produce sets of "N serial data elements." This is material to the patentability of at least claims 1, 17, and 23. As a further example, Figure 1(a) and the description in Part II.A show that the "N serial data elements" are modulated by "N carrier frequencies" and that the "N serial data elements" are spaced by an interval equal to the inverse of the symbol rate frequency. This is material to the patentability of at least claims 1, 17, and 23. Another example is shown in Figure 1(a) and the accompanying description in Part II.A of the

Cimini article in which the parallel data streams are frequency division multiplexed to produce a single waveform for data transmission. This is material to the patentability of at least claims 1, 17, and 23. As a further example, Figure 1(b) shows a receiver for receiving the modulated data symbols, which is material to the patentability of at least claim 17, and also shows a means for operating on the sequence of modulated data symbols to generate an estimate of the second data stream, and a parallel-to-serial converter to convert the parallel streams into a single output which are material to the patentability of at least claim 17. Additionally, the Cimini article is not cumulative of the references cited during the prosecution of the '268 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Cimini.

26. On information and belief, Applicants deliberately failed to disclose the Cimini article to the USPTO with an intent to deceive during the prosecution of the '268 patent. For example, Fattouche and Zaghoul identified the Cimini article during the prosecution of the '222 patent prior to filing the application for the '268 patent. Moreover, in the specification for the '268 patent, Fattouche and Zaghoul state that "[w]hen $L=2$ with the first N -point transform being a DFT and the second being a RT, we have a system identical to the ['222] patent," confirming their belief in the materiality of the '222 patent to the '268 patent, and under that belief the corresponding need to disclose the Cimini article in connection with the prosecution of the '268 patent. Fattouche and Zaghoul further confirmed their belief in the materiality of the Cimini article by providing it to the USPTO during prosecution of the '802 patent.

27. Under Wi-LAN's improper assertions of infringement and improper application of the claims, Yerbury is at least material to the patentability of at least independent claims 1, 17 and 23 of the '268 patent and claims that depend from those claims. For example, Yerbury

shows a transmission system whereby “pseudo-noise (PN) codes are used asynchronously to direct sequence modulate the channel carriers at a high rate relative to the data rate;” this allows a number of information bearing channels to share the same medium and “approximately the same frequency band.” See, e.g., ‘560 patent, col. 1:10–17. Claim 1 of Yerbury and the related disclosure are material to the patentability of at least independent claims 1, 17 and 23 of the ‘268 patent and dependent claim 18 of the ‘268 patent. As a further example, Claim 10 of Yerbury describes the receiving means for the transmission system, which includes a “plurality of receiver channels,” and a “correlation means” for collapsing the spread-spectrum signal to a narrow bandwidth “corresponding to the transmission channel signal bandwidth.” See, e.g., *id.* at col. 9:5–18. Claim 10 of Yerbury, and the related description, is material to the patentability of at least dependent claims 10, 12, and 21 of the ‘268 patent. As another example, Claim 10 of Yerbury describes a receiver means and a correlation means “provided for each receiver channel to cause the spread-spectrum signal received on a respective channel to be collapsed to a narrow bandwidth,” and claim 27 of Yerbury specifies that to produce an estimate of the data stream, the collapsed signal is passed through a narrowband filter, which are material to the patentability of at least claims 10, 12, and 21 of the ‘268 patent. Additionally, Yerbury is not cumulative of the information in the references cited during the prosecution of the ‘268 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Yerbury.

28. On information and belief, Applicants deliberately failed to disclose the Yerbury reference to the USPTO with an intent to deceive during prosecution of the ‘268 patent. For example, during prosecution of the ‘222 patent, more than a year before Fattouche and Zaghoul filed for the ‘268 patent, the Examiner cited Yerbury in a December 10, 1992 Office Action, and

stated that Yerbury was “pertinent to the applicant’s disclosure.” In the specification for the ‘268 patent, Fattouche and Zaghoul state that “[w]hen $L=2$ with the first N -point transform being a DFT and the second being a RT, we have a system identical to the [‘222] patent,” confirming their belief in the materiality of the ‘222 patent to the ‘268 patent, and their belief in the need to disclose Yerbury in connection with the prosecution of the ‘268 patent. Fattouche and Zaghoul further confirmed their belief in the materiality of Yerbury by providing it to the USPTO during prosecution of the ‘802 patent.

29. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, the Bingham article is material to the patentability of at least independent claims 1, 17, and 23 of the ‘268 patent and claims that depend from those claims. For example, Figure 1 of Bingham and the accompanying description in the Multiplexing section of the article show a multicarrier modulation scheme, whereby input data are grouped into blocks of M bits; the M bits are then used to modulate carriers spaced across a usable frequency band, and the modulated carriers are summed for transmission. This is material to the patentability of at least claims 1, 2, 17, 18, 23, and 24 of the ‘268 patent. As a further example, Bingham describes demodulating the received signal in the receiver by performing a real-to-complex Fast Fourier Transform. This is shown in Figure 7, and the accompanying description in the section Implementation, in which the receiver performs a serial-to-parallel conversion followed by a Fast Fourier Transform; the data is then sent through a decoder and a parallel-to-serial buffer. These descriptions are material to the patentability of at least claim 10 of the ‘268 patent. Additionally, Bingham is not cumulative of the references cited during the prosecution of the ‘268 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Bingham.

30. On information and belief, Applicants deliberately failed to disclose the Bingham reference to the USPTO with an intent to deceive during prosecution of the '268 patent. Fattouche and Zaghoul confirmed their belief in the materiality of the Bingham article by providing it to the USPTO during prosecution of the '802 patent, a reissue of the '268 patent.

31. Under Wi-LAN's improper assertions of infringement and improper application of the claims, the Hirosaki article is material to the patentability of at least independent claims 1, 17, and 23 of the '268 patent and the claims that depend from those claims. For example, Part 2 of the Hirosaki article shows using the orthogonally multiplexed quadrature amplitude modulation technique, whereby the "entire transmission band is divided into a number of mutually spectrum overlapping subchannels." The subchannels can be discriminated from each other provided they are orthogonal. This is material to the patentability of at least claims 1, 17, and 23 of the '268 patent. As a further example, Part 4 of the Hirosaki article shows a modem composed of five functional blocks: the transmitter, the receiver, the 8-channel time division multiplexer, the modem controller, and the time pulse generator. A microprocessor at the transmitter encodes the original data into a block of bits to be transmitted over each channel. Part 4 further discloses applying the following processing to a received signal: low-pass filter, gain control, and then digital conversion. This is material to the patentability of at least claim 17 of the '268 patent. Additionally, Hirosaki is not cumulative of the references cited during the prosecution of the '268 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Hirosaki.

32. On information and belief, Applicants deliberately failed to disclose the Hirosaki article to the USPTO with an intent to deceive during the prosecution of the '268 patent. For example, Fattouche and Zaghoul included the Hirosaki article in an Information Disclosure

Statement submitted to the USPTO on August 10, 1992 during the prosecution of '222 patent, one and a half years before filing for the '268 patent. Fattouche and Zaghloul further confirmed their belief in the materiality of the Hirosaki article by providing it to the USPTO during prosecution of the '802 patent, a reissue of the '268 patent.

33. Under Wi-LAN's improper assertions of infringement and improper application of the claims, Kromer is material to the patentability of at least claims 1, 10, and 17 of the '802 patent and the claims that depend from those claims. For example, Figure 2 of Kromer and the accompanying description at 4:29 through 5:41, and claims 1 and 10, are material to the patentability of at least independent claims 1 and 10 of '802 patent. As a further example, claim 1 of Kromer shows a transmitter having (1) "a convolutional encoder for transforming each of a plurality of information bit sequences," and (2) a "modulated signal generating means, in response to each of said expanded bit sequences" which are material to the patentability of at least claims 1, 2, 17, 18, and 33 of the '802 patent. As another example, claim 1 of Kromer shows a receiver "having a demodulation and slicer means for demodulating and detecting said modulated carrier signal to obtain a plurality of received expanded bit sequences." This is material to the patentability of at least claim 17 of the '802 patent. Additionally, Kromer is not cumulative of the references cited during the prosecution of the '802 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Kromer.

34. On information and belief, Applicants deliberately failed to disclose Kromer to the USPTO with an intent to deceive during the prosecution of the '802 patent. For example, during the prosecution of U.S. Patent No. 5,127,024 ("the '024 patent"), the examiner stated that Kromer shows "a data modulator for transmitting a sequence of data symbols at a symbol rate

1/T, the modulator being characterized as having a carrier frequency and data symbols, the data symbol is real or complex and is the time index of the symbol.” The ‘024 patent lists Fattouche as an inventor.

35. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, Christy is material to the patentability of at least claims 1, 2, 17, and 21 of the ‘802 patent and the claims that depend from those claims. For example, claim 1 of Christy discloses a base station with “means for transmitting a spread spectrum signal,” and claim 2 of Christy further specifies that the “means for transmitting comprises means for generating a pseudorandom noise code, means for generating a carrier signal and means for modulating said carrier signal with said pseudorandom noise code.” These descriptions are material to the patentability of at least claims 1, 2, and 17 of the ‘802 patent. As a further example, Christy shows using pseudorandom noise codes to generate modulated data which is material to the patentability of at least claim 17 of the ‘802 patent. As another example, dependent claim 4 of Christy discloses a “detection means” for “duplicating said pseudorandom noise codes” and a “means for cross correlating said receiver spread spectrum signal with said duplicated pseudorandom noise code.” These descriptions are material to the patentability of at least claims 12, 17, and 21 of the ‘802 patent. Additionally, Christy is not cumulative of the references cited during the prosecution of the ‘802 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Christy.

36. On information and belief, Applicants deliberately failed to disclose Christy to the USPTO with an intent to deceive during the prosecution of the ‘802 patent. For example, Fattouche and Zaghoul listed the Christy abstract in an Information Disclosure Statement

submitted to the USPTO during prosecution of U.S. Patent No. 5,890,068 (“the ‘068 patent”), which lists Fattouche and Zaghoul as inventors.

37. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, Yokev is material to the patentability of at least claims 1 and 17 of the ‘802 patent and the claims that depend from those claims. For example, dependent claim 7 of Yokev shows a carrier generator means for “producing a series frequencies for the frequency-hopped spread spectrum carrier, selected in response to the repeating pseudo-random code sequence;” claim 7 further shows a “modulation means” for “modulating the information onto the frequency-hopped spread spectrum carrier for transmission by the transmitter.” Also, claim 24 of Yokev shows that collisions between signals can be avoided “through the use of an orthogonal set of selected frequencies and patterns.” These descriptions are material to the patentability of at least claims 1 and 17 of the ‘802 patent. Additionally, Yokev is not cumulative of the references cited during the prosecution of the ‘802 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Yokev.

38. On information and belief, Applicants deliberately failed to disclose Yokev to the USPTO with an intent to deceive during the prosecution of the ‘802 patent. For example, Yokev was cited in an Information Disclosure Statement submitted to the USPTO during prosecution of U.S. Patent No. 5,887,022 (“the ‘022 patent”) which lists Fattouche as an inventor.

39. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, Carlson is material to the patentability of at least claims 1, 2, and 17 of the ‘802 patent and the claims that depend from those claims. For example, Carlson states: “Spread spectrum communications systems employ special techniques designed to combat strong interference and/or to prevent message recovery by unauthorized receivers. As the name

suggests, these techniques spread the transmitted signal spectrum over a frequency range much greater than the message bandwidth. The spectral spreading involves an auxiliary pseudo-noise (PN) process that looks random but can be replicated by authorized receivers.” This section, which includes the structure at the receiver to demodulate the spread spectrum signal, is material to the patentability of at least claims 1 and 17. As a further example, Carlson shows using multiple spread spectrum codes, which is material to the patentability of at least claims 1, 2, and 17 of the ‘802 patent. Additionally, Carlson is not cumulative of the references cited during the prosecution of the ‘802 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Carlson.

40. On information and belief, Applicants deliberately failed to disclose the Carlson reference to the USPTO with an intent to deceive during the prosecution of the ‘802 patent. For example, Fattouche published a 1989 paper, “An Adaptive Minimum Redundancy Array for Digital Communications,” in which the Carlson reference was relied upon for its disclosures related to the bit error probability in a communications system using QPSK signals.

41. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, Zhu is at least material to the patentability of at least independent claims 1, 17, and 23 of the ‘802 patent and claims that depend from those claims. For example, Zhu shows two methods for increasing frequency utilization in spread spectrum communications. Zhu shows a method whereby “different spread sequences” are assigned “to each bit state equal in numbers to the number of transmission data points involved,” and Figure 2 of Zhu and the accompanying description shows an implementation of a parallel combinatory spread spectrum system, including a serial to parallel converter for data, a combiner to combine the data prior to transmission, and a modulator for modulating the data with a carrier. These descriptions are

material to the patentability of at least claims 1, 17 and 23 of the '802 patent. As a further example, Figure 1 and the accompanying description shows the receiving means, including a demodulator, "reverse spreading using N spread sequences," and a parallel to serial converter to convert the data into a final output. This is material to the patentability of at least claim 17 of the '802 patent. Additionally, Zhu is not cumulative of the references cited during the prosecution of the '802 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Zhu.

42. On information and belief, Applicants deliberately failed to disclose Zhu to the USPTO with an intent to deceive during the prosecution of the '802 patent.

43. Additionally, during the prosecution of the '268 and '802 patents, Applicants made knowingly false statements to the USPTO on topics material to the patentability of the '802 patent. For example, during the prosecution of the '268 patent, Applicants falsely stated that "[t]his is believed to be the first proposal for the use of spread spectrum for mobile transceivers" in order to distinguish the application over prior art cited by the examiner. See '268 Prosecution History, Aug. 28, 1995 Response to Office Action at 16. This statement was a primary basis on which Applicants distinguished then claim 41, which issued as claim 23, and at the time this statement was made, Applicants were aware of numerous prior art references showing the use of spread spectrum for mobile transceivers. For example, in 1991, Fattouche and Zaghoul cited the EIA/TIA "Dual-Mode mobile station-base station compatibility standard" (Jan. 1990) in their article entitled "Diversity for Indoor Radio Communications," and in 1992, during the prosecution of the '222 patent, the USPTO provided U.S. Patent No. 5,063,560 to Applicants in the course of an office action. Both of these references show mobile spread-spectrum transceivers.

44. In addition, during the reissue proceedings, Applicants secured the '802 patent for an alleged invention not disclosed in the '268 patent by submitting a declaration in which they falsely and misleadingly claimed error. See '802 prosecution history at Sep. 1998 Inventor Declaration, ¶¶ 5–8. For example, Applicants falsely stated that there was error in connection with claim elements concerning the number of data symbols, codes, and chips per code.

45. On information and belief, Applicants engaged in a pattern and practice of deliberately withholding and misrepresenting material information during prosecution of the '268 and '802 patents with the intent to deceive the USPTO, rendering the '802 patent unenforceable for inequitable conduct. The permeation and extent of this misconduct throughout Applicants' prosecution as noted above and as noted in connection with the additional patents in suit further confirms that Applicants acted with intent to deceive.

46. Furthermore, the '802 patent is unenforceable under the doctrine of infectious unenforceability because of Applicants' pattern of inequitable conduct during prosecution of other patents including the '268 patent. In addition to revealing the intent to deceive at all relevant times, this pattern infects and renders the '802 patent unenforceable.

47. 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.

48. A judicial declaration is necessary and appropriate so that LGEMU may ascertain its rights regarding the '802 patent.

COUNT FOUR

Declaratory Judgment of Non-Infringement of U.S. Patent No. 5,282,222

49. LGEMU restates and incorporates by reference its allegations in Paragraphs 1 through 48 of its Counterclaims.

50. Wi-LAN alleges that LGEMU has been and is now infringing, directly and/or indirectly, the '222 patent.

51. LGEMU has not infringed and does not infringe, directly or indirectly, any valid and enforceable claim of the '222 patent.

52. An actual controversy exists between LGEMU and Wi-LAN as to whether the '222 patent is not infringed by LGEMU.

53. A judicial declaration is necessary and appropriate so that LGEMU may ascertain its rights regarding the '222 patent.

COUNT FIVE

Declaratory Judgment of Invalidity of U.S. Patent No. 5,282,222

54. LGEMU restates and incorporates by reference its allegations in Paragraphs 1 through 53 of its Counterclaims.

55. Wi-LAN alleges that LGEMU has been and is now infringing, directly and/or indirectly, the '222 patent.

56. One or more claims of the '222 patent are invalid for failure to satisfy the requirements of one or more of 35 U.S.C. §§ 100 et seq., 101, 102, 103, 112, and 132.

57. An actual case or controversy exists between LGEMU and Wi-LAN as to whether the '222 patent is invalid.

58. A judicial declaration is necessary and appropriate so that LGEMU may ascertain whether the '222 patent is invalid.

COUNT SIX

Declaratory Judgment of Unenforceability of U.S. Patent No. 5,282,222

59. LGEMU restates and incorporates by reference its allegations in paragraphs 1 through 58 of its Counterclaims.

60. On information and belief, individuals subject to the duty of candor under 37 C.F.R. § 1.56 (“Applicants”), including listed inventors Fattouche and Zaghoul and counsel, engaged in inequitable conduct by withholding material information with the intent to deceive the USPTO in connection with prosecuting U.S. Patent No. 5,282,222 (“the ‘222 patent”).

61. Prior to the issuance of the ‘222 patent, Fattouche and Zaghoul became aware of prior art that is material to the patentability of the ‘222 patent, including at least John A. C. Bingham, “Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come,” IEEE Communications (May 1990) (“Bingham”); John G. Proakis, Digital Communications (2d ed. McGraw-Hill 1989) (“Proakis”); and Bruce Carlson, Communication Systems: An Introduction to Signals and Noise in Electrical Communication (3d ed. McGraw-Hill 1986) (“Carlson”).

62. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, the Bingham article is material to the patentability of at least independent claims 1 and 7 of the ‘222 patent and claims that depend from those claims. For example, in the section Multiplexing, Bingham shows a frequency division multiplexer for multiplexing information, where the information is spaced across any usable frequency band. This is material to the patentability of at least claim 1 of the ‘222 patent. As another example, in the section Modulation and Demodulation, Bingham specifies that the sub-bands are orthogonal, and describes processing the received information at the receiver. These descriptions are material to the patentability of at least independent claim 7 of the ‘222 patent. As a further example, the Bingham article also shows “Adaptive Loading,” which requires the receiver to “measure the sub-band SNRs, calculate the best power and bit assignments, and send this information back to the transmitter.” This is material to the patentability of at least dependent claims 3 and 5.

Another example is found in the section, “Correcting for the Effects of Channel Impairments,” in which Bingham describes linearly equalizing the received signal, and calculating the channel characteristics. This is material to the patentability of at least claims 1 and 7 of the ‘222 patent. Additionally, Bingham is not cumulative of the references cited during the prosecution of the ‘222 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Bingham.

63. On information and belief, Applicants deliberately failed to disclose the Bingham article to the USPTO with an intent to deceive during prosecution of the ‘222 patent. For example, Fattouche and Zaghoul were aware of the Bingham article and confirmed their belief in the materiality of the Bingham article by providing it to the USPTO during prosecution of the ‘802 patent.

64. Under Wi-LAN’s improper assertions of infringement and improper application of the claims, the Proakis reference is material to the patentability of at least independent claim 1 of the ‘222 patent and claims that depend from that claim. For example, Figure 8.1.1 and the accompanying description show the basic elements of a spread spectrum digital communications system. The figure shows a channel encoder and a channel decoder which are material to the patentability of at least claim 1. As a further example, Proakis shows the following receiver elements: a bandpass filter for filtering the received signal and a local oscillator which are material to the patentability of at least claim 1. As another example, the communications system in Proakis describes using a sampler for “sampling the output of the correlator,” as shown in Figure 8.2.2. This is material to the patentability of at least claim 1. A further example is shown in section 4.5.1, which describes methods that can be used for estimating the phase difference of the received signal. Figure 4.5.1 illustrates one method of carrier recovery using a square-law

device. This illustration and the accompanying description are material to the patentability of at least claim 1. Additionally, Proakis is not cumulative of the references cited during the prosecution of the '222 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Proakis.

65. On information and belief, Applicants deliberately failed to disclose the Proakis reference to the USPTO with an intent to deceive during the prosecution of the '222 patent. For example, Fattouche published a 1991 paper, "A Spread Spectrum Radiolocation Technique and Its Application to Cellular Radio," in which Proakis was relied upon for its disclosures related to the receiver structure in a communications system. Then, in a paper published by inventors Fattouche and Zaghoul, in 1992 during prosecution of the '222 patent, the inventors recognized that Proakis was relevant to modeling of the indoor radio propagation channel. Applicants further confirmed the materiality of Proakis by referencing it in the '268 patent specification concerning commonly used spread spectrum techniques.

66. Under Wi-LAN's improper assertions of infringement and improper application of the claims, Carlson is material to the patentability of at least claims 1 and 2 of the '222 patent. For example, in section 2.2, Carlson shows using Fourier transforms as a means to represent signals in either frequency-domain or time-domain representation. This is material to the patentability of at least independent claim 1, and dependent claim 2 of the '222 patent. As a further example, Carlson shows, in section 12.4, digital multiplexing, whereby two or more digital signals are interleaved. This is material to the patentability of at least claim 1. Additionally, Carlson is not cumulative of the references cited during the prosecution of the '222 patent, including at least because the references cited during prosecution do not show the claim limitations as presented by Carlson.

67. On information and belief, Applicants deliberately failed to disclose the Carlson reference to the USPTO with an intent to deceive during the prosecution of the '222 patent. For example, Fattouche published a 1989 paper, "An Adaptive Minimum Redundancy Array for Digital Communications," in which the Carlson reference was relied upon for its disclosures related to the bit error probability in a communications system using QPSK signals.

68. Accordingly, on information and belief, Applicants engaged in a pattern and practice of deliberately withholding and misrepresenting material information during prosecution with an intent to deceive the USPTO, rendering the '222 patent unenforceable for inequitable conduct. The permeation and extent of this misconduct throughout Applicants' prosecution as noted above and as noted in connection with the additional patents in suit further confirms that Applicants acted with intent to deceive.

69. Furthermore, the '222 patent is unenforceable under the doctrine of infectious unenforceability because of Applicants' pattern of inequitable conduct during prosecution of other patents to the extent alleged by Wi-LAN to be related to the '222 patent. In addition to revealing the intent to deceive at all relevant times, this pattern infects and renders the '222 patent unenforceable.

70. 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.

71. A judicial declaration is necessary and appropriate so that LGEMU may ascertain its rights regarding the '222 patent.

COUNT SEVEN

Fraud

72. LGEMU incorporates and realleges Paragraphs 1 through 71 of its Counterclaims as if set forth fully herein.

A. The IEEE's Rules and Policies Regarding Standards

73. In this action, Wi-LAN has alleged that mobile handsets and other products having wireless capability compliant with the IEEE 802.11 standards infringe the '802 and '222 patents.

74. 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.

75. 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.

76. 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, "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:

This 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.

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

78. 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.

79. 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

80. On information and belief, Wi-LAN intentionally and knowingly made material misrepresentations and/or omissions in connection with standards-setting organizations, including as set forth below.

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

82. 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.

83. 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").

84. 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.

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

86. 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.

87. 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.

88. 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 recommendation of the 802.11b task group.

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

90. 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 that Wi-LAN alleges are infringed by certain products having wireless capability compliant with the IEEE 802.11 standards.

91. 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, “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 IEEE802.11b draft standard.”

92. 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 - r1 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 expressed the view that "We no longer feel that WiLAN IP position applies to the proposed 802.11b standard."

93. On information and belief, 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.

94. On information and belief, Wi-LAN, Fattouche, and/or Zaghoul made numerous other misrepresentations and/or omissions regarding Wi-LAN's patents with intent to deceive. For example, on information and belief, in or around the same time period that Wi-LAN was contemplating or pursuing the reissue application that eventually issued as the '802 patent, Wi-LAN, Fattouche, and/or Zaghoul were aware that the patents-in-suit were invalid, were unenforceable, and/or did not apply to the accused products. For instance, on information and belief, Wi-LAN obtained information confirming the invalidity of the claims applied for in connection with the reissue application/'802 patent. On information and belief, Wi-LAN was also aware of facts revealing numerous acts of inequitable conduct, rendering the claims unenforceable, as alleged above, and continued to engage in inequitable conduct during prosecution of the reissue application/'802 patent. See Paragraphs 21-48 and 59-71. Despite this knowledge, Wi-LAN intentionally and in bad faith made misrepresentations and/or omissions

concerning the validity and enforceability of the patents. As another example, Wi-LAN was aware of limitations on its ability to obtain monetary recoveries and injunctive relief with respect to its patents, but continued to seek licenses on unreasonable and discriminatory terms. For instance, on information and belief, Wi-LAN was aware of facts revealing that products allegedly embodying the inventions of the patents-in-suit were sold by Wi-LAN without being properly marked. Wi-LAN also sought unreasonable and discriminatory licenses with intentional disregard of promises Wi-LAN and/or Wi-LAN's predecessors-in-interest made to standards-setting organizations and their members, and notwithstanding its knowledge of the facts alleged herein.

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

95. 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 to qualified applicants in accordance with the IEEE Patent Policy." The 802.11 working group adopted the referenced proposal.

96. 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 to qualified applicants in accordance with the IEEE Patent Policy.” The 802.11 working group adopted the referenced standard.

97. 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 IEEE802.11b Task Group G Draft Standard is adopted by the IEEE, on fair, reasonable and non-discriminatory terms and conditions to qualified applicants in accordance with the IEEE Patent Policy.”

98. On information and belief, 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, in intentional disregard of promises Wi-LAN made to standards setting organizations and their members, notwithstanding Wi-LAN’s knowledge of the facts alleged herein.

99. On information and belief, 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 and other representations, as alleged herein.

100. On information and belief, Wi-LAN’s misrepresentations and/or omissions were knowingly false and made in bad faith with the intent to induce reliance.

101. The IEEE and its members reasonably have relied on the foregoing misrepresentations and/or omissions in adopting and using the 802.11 standards. Furthermore, LGEMU reasonably has 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.

102. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage LGEMU. On information and belief, Wi-LAN's conduct was malicious and willful, and LGEMU is entitled to punitive damages.

COUNT EIGHT

Constructive Fraud

103. LGEMU incorporates and realleges Paragraphs 1 through 102 above as if set forth fully herein.

104. On information and belief, 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.

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

106. The IEEE and its members reasonably have relied on the foregoing misrepresentations and/or omissions in adopting and using the 802.11 standards. Furthermore, LGEMU reasonably has 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.

107. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage LGEMU. On information and belief, Wi-LAN's conduct was malicious and willful, and LGEMU is entitled to punitive damages.

COUNT NINE

Negligent Misrepresentation

108. LGEMU incorporates and realleges Paragraphs 1 through 107 above as if set forth fully herein.

109. On information and belief, 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.

110. On information and belief, Wi-LAN's misrepresentations and/or omissions were false and made with the intent to induce reliance.

111. The IEEE and its members reasonably have relied on the foregoing misrepresentations and/or omissions in adopting and using the 802.11 standards. Furthermore, LGEMU reasonably has 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.

112. The foregoing actions and conduct by Wi-LAN have damaged and continue to damage LGEMU.

COUNT TEN

Promissory Estoppel

113. LGEMU incorporates and realleges Paragraphs 1 through 112 above as if set forth fully herein.

114. Wi-LAN made representations and engaged in other conduct, including Wi-LAN's 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.

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

116. The IEEE and its members, reasonably have relied on the foregoing promises in adopting and using the 802.11 standards. Furthermore, LGEMU reasonably has 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.

117. LGEMU 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-LAN's promises.

COUNT ELEVEN

Breach of Contract

118. LGEMU incorporates and realleges Paragraphs 1 through 117 above as if set forth fully herein.

119. 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.

120. 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.

121. Furthermore, Wi-LAN's 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.

122. 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 LGEMU from making and selling 802.11 compliant products, and through misrepresentations and/or omissions regarding its patents and/or patent applications.

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

COUNT TWELVE

Unclean Hands

124. LGEMU incorporates and realleges Paragraphs 1 through 123 above as if set forth fully herein.

125. Wi-LAN has engaged in conduct comprising unclean hands rendering the patents unenforceable in this action. Wi-LAN has engaged in a pattern and practice of improper activity to acquire, license, and assert the patents-in-suit in bad faith, including by making false and objectively baseless claims of patent infringement either without a reasonable investigation or basis in fact or law, and with knowledge that the patents-in-suit are invalid, unenforceable, and/or not infringed by the accused standards and products. Defendants, including LGEMU, manufacture and sell products accused in this action, and Wi-LAN's assertions have thus caused Defendants, including LGEMU, to incur substantial damages as a result of Wi-LAN's bad faith conduct.

126. For example, Wi-LAN committed fraud in connection with standards-setting organizations and engaged in other bad faith actions. In particular, on information and belief, Wi-LAN and/or Wi-LAN's predecessors in interest intentionally and knowingly made material misrepresentations and/or omissions relating to the patents-in-suit in connection with standards-setting organizations, including to the IEEE 802.11 working group. Wi-LAN's pattern of bad faith assertion also includes seeking licenses on unreasonable and discriminatory terms in intentional disregard of promises Wi-LAN and/or Wi-LAN's predecessors-in-interest to the patents-in-suit made to standards-setting organizations and their members. See, e.g., Paragraphs 113-123.

127. Similarly, prior to and during the time that Wi-LAN was asserting the patents-in-suit against Defendants, including LGEMU, Wi-LAN had knowledge that the

patents-in-suit are invalid and unenforceable. For example, on information and belief, Wi-LAN obtained information confirming the invalidity of the claims applied for in connection with the '802 patent. Wi-LAN is also aware of facts revealing numerous acts of inequitable conduct, rendering the patents-in-suit unenforceable, as alleged above. See Paragraphs 21–48 and 59-71. Nevertheless, Wi-LAN asserted the patents-in-suit against products relating to the accused standards in bad faith.

128. Wi-LAN has also asserted bad faith claims for injunctive relief and monetary recoveries for Defendants', including LGEMU's, alleged infringement of the patents-in-suit. For example, on information and belief, despite having exited the products business to become a patent licensing company and having knowledge that it is not entitled to an injunction, Wi-LAN has engaged in an effort to publicize sham research and development activities unrelated to the accused standards. As another example, Wi-LAN is claiming damages for sales occurring before any legally-proper notice was provided under 35 U.S.C. § 287, despite Wi-LAN's knowledge of the absence of such notice, including, on information and belief, because of Wi-LAN's awareness of facts revealing that products allegedly embodying the inventions of the patents-in-suit were sold by Wi-LAN or its predecessors-in-interest without being properly marked. Wi-LAN also deliberately destroyed, otherwise disposed of, or failed to prevent the destruction of highly relevant and discoverable evidence at a time when Wi-LAN was asserting the patents-in-suit against Defendants, including LGEMU, and third parties.

129. Wi-LAN's pattern of asserting patents known to be invalid, unenforceable, and/or not infringed, including the patents-in-suit, has facilitated Wi-LAN's acquisition of additional patents which Wi-LAN then, in turn, has improperly asserted against others.

130. Additionally, Wi-LAN has been accused of bad faith conduct in connection with ownership of the patents-in-suit. *See Telus Corp. v. Wi LAN Inc.*, Action No. 0901-06070 (Queen’s Bench of Alberta, filed Apr. 23, 2009). For example, according to Telus Corporation (“Telus”), Telus has ownership rights in patents allegedly assigned to Wi-LAN, including the ‘268 and ‘802 patents. According to Telus, Wi-LAN wrongfully attempted to transfer ownership of patents from Telus to Wi-LAN.

131. In accordance with the doctrine of unclean hands, Wi-LAN’s acts, practices, and misconduct described above have damaged LGEMU and bar Wi-LAN’s enforcement of the patents-in-suit against LGEMU

132. 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.

133. A judicial declaration is necessary and appropriate so that LGEMU may ascertain its rights regarding the patents-in-suit.

COUNT THIRTEEN

Unfair Business Practices Under Cal. Bus. & Prof. Code § 17200

134. LGEMU restates and realleges paragraphs 1 through 133 above as if set forth fully herein.

135. Unfair business practices under Cal. Bus. & Prof. Code § 17200 et seq. includes any unfair, unlawful, or fraudulent business act or practice. The conduct described above in paragraphs 21–48, 59-71 and 72-133 comprises unfair business practices under Section 17200 et seq.

136. Misconduct and injuries pertaining to the above referenced conduct have occurred within California, either of which gives rise to a § 17200 claim. With respect to injury in

California, Defendants, including LGEMU, conduct business related to the accused standards and products in California, and sell accused products to customers located in California.

137. In addition to injuries in California, various acts of misconduct alleged in the preceding counts occurred in California, including relevant meetings of standards-setting organizations and Wi-LAN's bad faith assertion of the patents-in-suit against Defendants.

138. Defendants, including LGEMU, are entitled to remedies, including attorneys fees, and disgorgement of Wi-LAN's ill-gotten gains, including investments, licensing royalties, or any recoveries obtained through the inappropriate conduct set forth in paragraphs 21-48, 59-71 and 72-133 above.

COUNT FOURTEEN

Waiver, Equitable Estoppel, and Estoppel

139. LGEMU incorporates and realleges paragraphs 1 through 138 above as if set forth fully herein.

140. LGEMU has denied that the claims of the '222 and '802 patents are enforceable and has asserted that such patent claims are unenforceable, in whole or in part, pursuant to the doctrines of express or implied waiver, equitable estoppel, and estoppels, including in accordance with the facts alleged above and incorporated by reference herein.

141. As a result, LGEMU is entitled to judgment from this Court finding that the claims of the '222 and '802 patents are unenforceable.

PRAYER FOR RELIEF

WHEREFORE, LGEMU prays for judgment as follows:

- a. A judgment dismissing Wi-LAN's complaint against LGEMU with prejudice;
- b. A judgment in favor of LGEMU on all of its Counterclaims;

- c. A declaration that LGEMU has not infringed, contributed to the infringement of, or induced others to infringe, either directly or indirectly, any valid claims of the '222 and '802 patents;
- d. A declaration that the '222 and '802 patents are invalid;
- e. A declaration that the '222 and '802 patents are unenforceable;
- f. An injunction against Wi-LAN and its affiliates, subsidiaries, assigns, employees, agents or anyone acting in privity or concert with Wi-LAN from charging infringement or instituting any legal action for infringement of the '222 and '802 patents against Defendants or anyone acting in privity with Defendants;
- g. An award to LGEMU for the amount of damages as proven at trial, including punitive damages and restitution;
- h. A declaration that this case is exceptional and an award to LGEMU of its reasonable costs and expenses of litigation, including attorneys' fees and expert witness fees;
- i. A judgment limiting or barring Wi-LAN's ability to enforce the '222 and '802 patents in equity;
- j. A judgment requiring Wi-LAN's specific performance under its contract with IEEE and/or IEEE members to grant licenses to LGEMU on fair, reasonable, and non-discriminatory terms and conditions;
- k. An award to LGEMU of, and a declaration that LGEMU has, a royalty-free license for the '222 and '802 patents;
- l. Such other and further relief as this Court may deem just and proper.

DEMAND FOR JURY TRIAL

In accordance with Rule 38 of the Federal Rules of Civil Procedure and Local Rule CV-38, Defendant LGEMU, Inc. respectfully demands a jury trial of all issues triable to a jury in this action.

Respectfully submitted,

YOUNG PICKETT & LEE

Dated: April 16, 2010

By: /s/ Gene W. Lee

Damon Young TX: 22176700
dyoung@youngpickettllaw.com
John M. Pickett TX: 15980320
jpickett@youngpickettllaw.com
4122 Texas Boulevard
P. O. Box 1897
Texarkana, TX 75504
Tel: (903) 794-1303
Fax: (903) 794-5098

**Attorneys for Defendant LG Electronics
Mobilecomm U.S.A., Inc.**

Of Counsel:
William J. McCabe
william.mccabe@ropesgray.com
Gene W. Lee
gene.lee@ropesgray.com
Stuart W. Yothers
stuart.yothers@ropesgray.com
ROPES & GRAY LLP
1211 Avenue of the Americas
New York, New York 10036
(212) 596-9000

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this motion was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Fed.R.Civ.P.5(d) and Local Rule CV-5(e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy via facsimile and/or U.S. First Class Mail this 16th day of April, 2010.

/s/ Gene W. Lee _____