United States District Court,
S.D. California.

QUALCOMM INCORPORATED,
Plaintiff.
v.
BROADCOM CORPORATION,
Defendants.
Broadcom Corporation,
Counter-Claimant.
v.
Qualcomm Incorporated,
Counter-Defendant.

Civil No. 05CV1392-B(BLM)

June 26, 2006.

CLAIM CONSTRUCTION ORDER FOR UNITED STATES PATENT NUMBER 6,320,896

RUDI M. BREWSTER**, Senior District Judge.**

Pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), on June5-8, 2006, the Court conducted a Markman hearing concerning the above-titled patent infringement action regarding construction of the disputed claim terms for U.S. Patent Number 6,320,896 ("the '896 patent"). Plaintiff Qualcomm, Inc. was represented by the law firm of Heller Ehrman LLP, and Defendant Broadcom Corp. was represented by the law firm of McAndrews, Held & Malloy, Ltd.

At the Markman hearing, the Court, with the assistance of the parties, analyzed the claim terms in order to prepare jury instructions interpreting the pertinent claims at issue in the '896 patent. Additionally, the Court prepared a case glossary for terms found in the claims and specification for the '896 patent considered to be technical in nature which a jury of laypersons might not understand clearly without a specific definition.

After careful consideration of the parties' arguments and the applicable statutes and case law, the Court **HEREBY CONSTRUES** the claims in dispute for the '896 patent and **ISSUES** the relevant jury instructions as written in Exhibit A, attached hereto. Further, the Court **HEREBY DEFINES** all pertinent technical terms as written in Exhibit B, attached hereto.

IT IS SO ORDERED.

EXHIBIT A FN1

FN1. All terms appearing in bold face type and underlined have been construed by the court and appear

with their definitions in the glossary in Exhibit B. The definition for each construed term appears in italics after its first use in the patent.

UNITED STATES PATENT NUMBER 6,320,896-CLAIM CHART

VERBATIM CLAIM LANGUAGE	**COURT'S CONSTRUCTION**
Claim 1	**Claim 1**
1. A receiving device for use in an environment in which both frequency-hopping and direct-sequence spread spectrum radio frequency (RF) signals are present, comprising:	1. A receiving device for use in an environment in which both ***frequency-hopping*** *[an RF signal that jumps between narrow-bands of frequencies in a* ***pseudorandom sequence*** *[a sequence that satisfies one or more standard tests for statistical randomness]] and* ***direct-sequence spread spectrum*** *[an RF signal modulated by a digital code sequence to spread the signal over a band of frequencies wider than the original information signal]* ***radio frequency (RF) signals*** *[signals having a frequency in the radio spectrum] are present, comprising [including but not limited to]:*
an RF receiver for receiving RF input signals;	an RF receiver for receiving ***RF input signals:***
a detector coupled to said receiver and having a plurality of parallel stages, each one of said stages sampling an RF energy level within a distinct band of frequencies; and	a detector coupled to said receiver and having a ***plurality*** [*two or more*] of parallel stages, each one of said stages ***sampling*** [*selecting a sample*] an ***RF energy level*** [*signal power*] within a ***distinct*** [*separately identifiable*] band of frequencies; and
a discriminator coupled to said detector for discriminating said RF input signals between frequency-hopping and direct-sequence spread spectrum signals, wherein said RF input signals comprise direct-sequence spread spectrum signals when RF energy is present in more than one of said stages, and said RF input signals comprise frequency-hopping spread spectrum signals when RF energy is present in only one of said stages.	a discriminator coupled to said detector for ***discriminating*** [*distinguishing*] said ***RF input signals*** between ***frequency-hopping*** and ***direct-sequence spread spectrum signals,*** wherein said ***RF input signals*** comprise ***direct-sequence spread spectrum*** signals when ***RF energy*** is present in more than one of said stages, and said ***RF input signals*** comprise ***frequency-hopping spread spectrum*** signals when ***RF energy*** is present in only one of said stages.
Claim 2	**Claim 2**
2. The device of claim 1, further comprising a controller for controlling said receiver responsive to said discriminator.	2. The device of claim 1, further ***comprising*** a controller for controlling said receiver responsive to said discriminator.
Claim 3	**Claim 3**
3. The device of claim 2, further comprising a demodulator coupled to said receiver and said controller, said demodulator recovering data from said received RF input signals, said controller	3. The device of claim 2, further ***comprising*** a demodulator coupled to said receiver and said controller, said demodulator recovering data from said received ***RF input signals,*** said controller modifying operation of said demodulator responsive to said discriminator.

modifying operation of said demodulator responsive to said discriminator.	
Claim 4	**Claim 4**
4. The device of claim 1, wherein each one of said stages comprises an integrator adapted to integrate received RF energy over a predetermined sampling time.	4. The device of claim 1, wherein each one of said stages ***comprises*** an integrator adapted to ***integrate*** [*add*] received RF energy over a predetermined sampling time.
Claim 5	**Claim 5**
5. The device of claim 1, wherein each one of said stages comprises a filter tuned to one of said distinct frequency bands.	5. The device of claim 1, wherein each one of said stages ***comprises*** a filter tuned to one of said ***distinct*** frequency bands.
Claim 6	**Claim 6**
6. The device of claim 5, wherein said filter further comprises an analog filter.	6. The device of claim 3, wherein said filter further ***comprises*** an analog filter.
Claim 7	**Claim 7**
7. The device of claim 5, wherein said filter further comprises a digital filter.	7. The device of claim 5, wherein said filter further ***comprises*** a digital filter.
Claim 8	**Claim 8**
8. A receiver for use in an environment in which both frequency-hopping and direct-sequence spread spectrum radio frequency (RF) signals are present, comprising:	8. A receiver for use in an environment in which both ***frequency-hopping*** and ***direct-sequence spread spectrum radio frequency (RF) signals*** are present, ***comprising:***
means for receiving and downconverting RF input signals; and	***means for receiving and downconverting RF input signals [This is a means-plus-function limitation.*** *The function is receiving and* ***downconverting*** *[converting to a lower frequency] RF input signals. The corresponding structure is an antenna, a filter, an amplifier stage, a downconversion mixer, and equivalents thereof]; and*
means for discriminating said RF input signals between frequency-hopping and direct-sequence spread spectrum signals by sampling energy level present in each one of a plurality of distinct frequency bands, wherein said RF input signals comprise direct-sequence spread spectrum signals when RF energy is present in more than one of said plurality of distinct frequency bands, and said RF input signals comprise frequency-hopping spread spectrum signals when RF energy is present in only one of said distinct frequency bands.	***means for discriminating said RF input signals between frequency-hopping and direct-sequence spread spectrum signals [This is a means-plus-function limitation.*** *The function is discriminating between frequency-hopping and direct sequence spread spectrum RF input signals. The corresponding structure is a discrimination circuit 30 in Figure 1, which includes filter banks and a logic unit, or equivalents thereof]* by ***sampling energy level*** present in each one of a ***plurality*** of ***distinct*** frequency bands, wherein said ***RF input signals*** comprise ***direct-sequence spread spectrum*** signals when ***RF energy*** is present in more than one of said ***plurality*** of ***distinct*** frequency bands, and said ***RF input signals*** comprise ***frequency-hopping spread spectrum*** signals when ***RF energy*** is present in only one of said ***distinct*** frequency bands.
Claim 9	**Claim 9**
9. The receiver of claim 8, further comprising means for recovering data from said downconverted RF input signals	9. The receiver of claim 8, further comprising ***means for recovering data from said downconverted RF input signals in response to said discriminating means. [This is a means-plus-***

in response to said discriminating means.	***function limitation.*** *The function is recovering data from said* ***downconverted*** *RF input signals. The corresponding structure is a demodulator 28 in Figure 1, or equivalents thereof.].*
Claim 10	**Claim 10**
10. The receiver of claim 8, wherein said discriminating means comprises a plurality of parallel stages and a detector coupled to said stages, each one of said stages being tuned for a distinct frequency band, said detector being adapted to sample an RF energy level passing through said stages and provide a signal indicating whether said RF input signals are frequency-hopping or direct-sequence spread spectrum signals.	10. The receiver of claim 8, wherein said ***discriminating means comprises a plurality*** of parallel stages and a detector coupled to said stages, each one of said stages being tuned for a ***distinct*** frequency band, said detector being adapted to sample an ***RF energy level*** passing through said stages and provide a signal indicating whether said ***RF input signals*** are ***frequency-hopping*** or ***direct-sequence spread spectrum*** signals.
Claim 11	**Claim 11**
11. The receiver of claim 10, wherein each one of said stages comprises a filter tuned to one of said distinct frequency bands.	11. The receiver of claim 10, wherein each one of said stages ***comprises*** a filter tuned to one of said ***distinct*** frequency bands.
Claim 12	**Claim 12**
12. The receiver of claim 10, wherein each one of said stages comprises an integrator adapted to integrate received RF energy over a predetermined time.	12. The receiver of claim 10, wherein each one of said stages ***comprises*** an integrator adapted to ***integrate*** received RF energy over a predetermined time.
Claim 13	**Claim 13**
13. The receiver of claim 10, wherein each one of said stages comprises an analog filter.	13. The receiver of claim 10, wherein each one of said stages ***comprises*** an analog filter.
Claim 14	**Claim 14**
14. The receiver of claim 10, wherein each one of said stages comprises a digital filter.	14. The receiver of claim 10, wherein each one of said stages ***comprises*** a digital filter.
Claim 15	**Claim 15**
15. The receiver of claim 8, wherein said data recovering means comprises a demodulator coupled to said receiving means.	15. The receiver of claim 8, wherein said data ***recovering means comprises*** a demodulator coupled to said ***receiving means.***
Claim 16	**Claim 16**
16. In an environment in which both frequency-hopping and direct-sequence spread spectrum radio frequency (RF) signals are present, a method for receiving data comprises:	16. In an environment in which both ***frequency-hopping*** and ***direct-sequence spread spectrum radio frequency (RF) signals*** are present, a method for receiving data ***comprises:***
receiving and downconverting RF input signals; and	receiving and ***downconverting RF input signals;*** and

discriminating said RF input signals between frequency-hopping and direct-sequence spread spectrum signals by sampling energy level present in each one of a plurality of distinct frequency bands, wherein said RF input signals are direct-sequence spread spectrum signals when RF energy is present in more than one of said plurality of distinct frequency bands, and said RF input signals are frequency-hopping spread spectrum signals when RF energy is present in only one of said plurality of distinct frequency bands.	***discriminating*** said ***RF input signals*** between ***frequency-hopping*** and ***direct-sequence spread spectrum*** signals by ***sampling energy level*** present in each one of a ***plurality*** or ***distinct*** frequency bands, wherein said ***RF input signals*** are ***direct-sequence spread spectrum*** signals when RF energy is present in more than one of said ***plurality*** of ***distinct*** frequency bands, and said ***RF input signals*** are ***frequency-hopping spread spectrum*** signals when ***RF energy*** is present in only one of said ***plurality*** of ***distinct*** frequency bands.
Claim 17	**Claim 17**
17. The method oF claim 16, further comprising recovering data from said downconverted RF input signals in response to said discriminating step.	17. The method oF claim 16, further ***comprising*** recovering data from said ***downconverted RF input signals*** in response to said ***discriminating*** step.
Claim 18	**Claim 18**
18. The method of claim 16, wherein said discriminating step comprises providing a signal indicating whether said RF input signals are frequency-hopping or direct-sequence spread spectrum signals.	18. The method of claim 16, wherein said ***discriminating*** step ***comprises*** providing a signal indicating whether said ***RF input signals*** are ***frequency-hopping*** or ***direct-sequence spread spectrum*** signals.
Claim 19	**Claim 19**
19. The method of claim 16, wherein said discriminating step comprises integrating received RF energy over a predetermined sampling time.	19. The method of claim 16, wherein said ***discriminating*** step ***comprises integrating*** received ***RF energy*** over a predetermined ***sampling*** time.

EXHIBIT B

UNITED STATES PATENT NUMBER 6,320,896-GLOSSARY OF TERMS

comprises	including but not limited to
comprising	including but not limited to
direct-sequence spread spectrum	an RF signal modulated by a digital code sequence to spread the signal over a band of frequencies wider than the original information signal
discriminating	distinguishing
discriminating means	See definition of "**means for discriminating said RF input signals between frequency-hopping and direct-sequence spread spectrum signals.**"
distinct	separately identifiable
downconverted	See definition of "**downconverting.**"
downconverting	converting to a lower frequency
energy	signal power
energy level	signal power

frequency-hopping	an RF signal that jumps between narrow-bands of frequencies in a ***pseudorandom sequence*** [a sequence that satisfies one or more standard tests for statistical randomness]
integrate	add
integrating	adding
means for discriminating said RF input signals between frequency-hopping and direct-sequence spread spectrum signals	**This is a means-plus-function limitation.** The function is discriminating between frequency-hopping and direct sequence spread spectrum RF input signals. The corresponding structure is a discrimination circuit 30 in Figure 1, which includes filter banks and a logic unit, or equivalents thereof.
means for receiving and downconverting RF input signals	**This is a means-plus-function limitation.** The function is receiving and ***downconverting*** [*converting to a lower frequency*] RF input signals. The corresponding structure is an antenna, a filter, an amplifier stage, a downconversion mixer, and equivalents thereof.
means for recovering data from said downconverted RF input signals in response to said discriminating means.	**This is a means-plus-function limitation.** The function is recovering data from said downconverted RF input signals. The corresponding structure is a demodulator 28 in Figure 1, or equivalents thereof.
plurality	two or more
pseudorandom sequence	a sequence that satisfies one or more standard tests for statistical randomness
receiving means	See definition of "**means for receiving and downconverting RF input signals.**"
recovering means	See definition of "**means for recovering data from said downconverted RF input signals in response to said discriminating means.**"
radio frequency (RF) signals	signals having a frequency in the radio spectrum
RF	radio frequency
RF input signals	See definition of "**RF signals**" [signals having a frequency in the radio spectrum]
sampling	selecting a sample

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