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)

May 2, 2006.

Adam Arthur Bier, Christian E. Mammen, Casebeer Madrid and Batchelder, Kevin Kook Tai Leung, Law Office of Kevin Kook Tai Leung, Cupertino, CA, David E. Kleinfeld, Brandon Hays Pace, Heller Ehrman, James T. Hannink, Kathryn Bridget Riley, Randall Evan Kay, Brooke Beros, DLA Piper US, Heidi Maley Gutierrez, Higgs Fletcher and Mack, San Diego, CA, E. Joshua Rosenkranz, Heller Ehrman, Evan R. Chesler, Cravath Swaine and Moore, Richard J. Stark, Cravath Swaine and Moore, Richard S. Taffet, Bingham McCutchen, New York, NY, Nitin Subhedar, Jaideep Venkatesan, Heller Ehrman, Menlo Park, CA, Jason A. Yurasek, Bingham McCutchen, San Francisco, CA, Patrick Taylor Weston, McCutchen Doyle Brown and Enersen, Walnut Creek, CA, William F. Abrams, Bingham McCutchen, East Palo Alto, CA, for Plaintiff/Counter-Defendant.

Alejandro Menchaca, Andrew B. Karp, Brian C. Bianco, Christopher N. George, Consuelo Erwin, George P McAndrews, Gregory C. Schodde, Joseph F. Harding, Lawrence M. Jarvis, Leonard D. Conapinski, Matthew A. Anderson, Ronald H. Spuhler, Scott P McBride, Stephen F. Sherry, Thomas J. Wimbiscus, Jean Dudek Kuelper, McAndrews Held and Malloy, Chicago, IL, Allen C. Nunnally, Kate Saxton, Daniel M. Esrick, John J. Regan, John S. Rhee, Joseph F. Haag, Louis W. Tompros, Richard W O'Neill, Stephen M. Muller, Vinita Ferrera, Wayne L. Stoner, William F. Lee, Wilmer Cutler Pickering Hale and Dorr, Boston, MA,James Sullivan McNeill, Robert S. Brewer, Jr., McKenna Long and Aldridge, San Diego, CA, James L Quarles, III, William J. Kolasky, Wilmer Cutler Pickering Hale and Dorr, Alina D. Eldred, Mark W. Nelson, Steven J. Kaiser, Cleary Gottleib Steen and Hamilton, Washington, DC, Maria K. Vento, Mark D. Selwyn, Wilmer Cutler Pickering Hale and Dorr, Palo Alto, CA, for Defendants/Counter-Claimant.

CLAIM CONSTRUCTION ORDER FOR UNITED STATES PATENT NUMBER 5,655,220

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

Pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), on April 4-6, 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 5,655,220 ("the '220 patent"). Plaintiff Qualcomm, Inc. was represented by the law firm of Day Casebeer Madrid & Batchelder LLP, and Defendant Broadcom Corp. was represented by the law firm of Wilmer Cutler Pickering Hale and Dorr LLP.

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 '220 patent. Additionally, the Court prepared a case glossary for terms found in the claims and specification for the '220 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 '220 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

UNITED STATES PATENT NUMBER 5,655,220-CLAIM CHART

VERBATIM CLAIM LANGUAGE	**COURT'S CONSTRUCTION**
Claim 2	**Claim 2**
2. A method for limiting transmit power of a radio operating in a radio communications system, the radio communications system comprising a plurality of base stations that transmit power control commands to the radio, the radio comprising a variable gain amplifier and a maximum gain setting, the method comprising the steps of:	2. A method for limiting ***transmit power of a radio*** [*level of power transmitted by the radio*] operating in a radio communications system, the radio communications system ***comprising*** [*including but not limited to*] a ***plurality*** [*two or more*] of ***base stations*** [*in a wireless communications system, any fixed station that communicates with mobile stations*] that transmit ***power control commands*** [*commands from the base station instructing the radio to turn up or turn down power*] to the ***radio*** [*a transmitter, receiver, or transceiver used for communication via electromagnetic waves*], the ***radio*** comprising a ***variable gain amplifier*** [*an amplifier whose gain can be changed up or down*] and a ***maximum gain setting*** [*upper limit on the gain setting. **Gain** is the ratio of output signal power to input signal power.*], the method ***comprising*** the steps of:
receiving a signal from at least one of the plurality of base stations;	receiving a signal from at least one of the ***plurality*** [*two or more*] of ***base stations*** [*in a wireless communications system, any fixed station that communicates with mobile stations*];
generating a received power level signal in response to the received signal;	***generating a received power level signal*** [*producing a value indicating a power level*] in response to ***the received signal*** [*the signal received from the base station*];
generating a closed loop power control signal in	generating a ***closed loop power control signal*** [*a value or quantity representing one or more power control commands (commands from the*

response to the received signal;	*base station instructing the radio to turn up or turn down power)*] in response to ***the received signal:***
combining the received power level signal and the closed loop power control signal to produce a summation signal;	combining ***the received power level signal*** and ***the closed loop power control signal*** to produce a summation signal;
comparing the summation signal to the maximum gain setting;	comparing the summation signal to the ***maximum gain setting;***
adjusting the variable gain amplifier in response to the maximum gain setting if the summation signal is greater than or equal to the maximum gain setting; and	***adjusting*** [*changing*] the ***variable gain amplifier*** in response to the ***maximum gain setting*** if the summation signal is greater than or equal to the ***maximum gain setting;*** and
adjusting the variable gain amplifier in response to the summation signal if the summation signal is less than the maximum gain setting .	***adjusting*** the ***variable gain amplifier*** in response to the summation signal if the summation signal is less than the ***maximum gain setting.***
Claim 7	**Claim 7**
7. A radio performing transmit power calibration, operating in a cellular environment comprising a plurality of cells that transmit power control commands to the radio, the radio receiving signals through a variable gain receive amplifier the radio comprising:	7. **A *radio*** [*a transmitter, receiver, or transceiver used for communication via electromagnetic waves*] performing transmit power calibration, operating in a cellular environment comprising a **plurality** of **cells** [*"cell" means a base station (in a wireless communications system, any fixed station that communicates with mobile stations) and the geographic area defined by its transmission range*] that transmit ***power control commands*** to the ***radio,*** the ***radio*** receiving signals through a ***variable gain receive amplifier*** [*a variable gain amplifier in a receiver*] the ***radio comprising:***
a receive power detector, coupled to the receive amplifier, for generating a received power level signal;	a receive power detector, coupled to the receive amplifier, for ***generating a received power level signal;***
a saturating accumulator coupled to the receive amplifier, for generating a closed loop power control signal in response to the power control commands;	a ***saturating accumulator*** [*a device that can accumulate a sum up to a certain limit*] coupled to ***the receive amplifier*** [*the variable gain amplifier in the receiver*], for generating a ***closed loop power control signal*** in response to the ***power control commands;***
a power limiting circuit, coupled to the receive power detector and the saturating accumulator, for generating a limiting gain control setting in response to the closed loop power control signal and the	a ***power limiting circuit*** [*a circuit that can be used for limiting the transmit power of a radio*], coupled to the receive power detector and the ***saturating accumulator,*** for generating a limiting gain control setting in response to the ***closed loop power control signal*** and ***the received power level signal,*** the limiting gain control setting being within a predetermined range;

received power level signal, the limiting gain control setting being within a predetermined range;	
a signal combiner, coupled to the receive power detector, the saturating accumulator and the power limiting circuit, for combining the received power level signal, the closed loop power control signal, and the limiting gain control setting to generate a transmit gain control signal; and	a signal combiner, coupled to the receive power detector, the ***saturating accumulator*** and ***the power limiting circuit,*** for combining the received power level signal, ***the closed loop power control signal,*** and the limiting gain control setting to generate a transmit gain control signal; and
a transmit amplifier having a variable gain and a control input coupled to the signal combiner, the variable gain adjusting in response to the transmit gain control signal.	a transmit amplifier having a variable gain and a control input coupled to the signal combiner, the variable gain ***adjusting*** in response to the transmit gain control signal.
Claim 8	**Claim 8**
8. The radio of claim 7 wherein the power limiting circuit further comprises:	8. The ***radio*** of claim 7 wherein the ***power limiting circuit*** further ***comprises*** [*including but not limited to*]:
a summer for combining the received power level signal and the closed loop power control signal to produce a summation signal; and	a summer for combining ***the received power level signal*** and the ***closed loop power control signal*** to produce a summation signal; and
a comparator coupled to the summer for comparing the summation signal to a maximum gain setting to generate the limiting gain control setting.	a comparator coupled to the summer for comparing the summation signal to a ***maximum gain setting*** to generate the limiting gain control setting.

EXHIBIT B

UNITED STATES PATENT NUMBER 5,655,220-GLOSSARY OF TERMS

TERM	*DEFINITION*
adjusting	changing
base stations	in a wireless communications system, any fixed station that communicates with mobile stations
cells	"cell" means a base station (in a wireless communications system, any fixed station that communicates with mobile stations) and the geographic area defined by its transmission range

closed loop power control signal	a value or quantity representing one or more power control commands (commands from the base station instructing the radio to turn up or turn down power)
comprises	including but not limited to
comprising	including but not limited to
gain	the ratio of output signal power to input signal power
generating a received power level signal	producing a value indicating a power level
maximum gain setting	upper limit on the gain setting
plurality	two or more
power control commands	commands from the base station instructing the radio to turn up or turn down power
power limiting circuit	a circuit that can be used for limiting the transmit power of a radio
radio	a transmitter, receiver, or transceiver used for communication via electromagnetic waves
saturating accumulator	a device that can accumulate a sum up to a certain limit
the receive amplifier	the variable gain amplifier in the receiver
the received power level signal	see definition of **"generating a received power level signal"**
the received signal	the signal received from the base station
transmit power of a radio	level of power transmitted by the radio
variable gain amplifier	an amplifier whose gain can be changed up or down
variable gain receive amplifier	a variable gain amplifier in a receiver

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.

S.D.Cal.,2006.
Qualcomm Inc. v. Broadcom Corp.