

# EXHIBIT 10

Defendant's Invalidation Contentions  
Exhibit D3

**Invalidity of U.S. Patent No. 6,408,193**  
**by**  
**U.S. Patent No. 6,236,863 to Waldroup, *et al.* (“Waldroup”)**

The excerpts cited herein are exemplary. For any claim limitation, Defendant may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to provide a more comprehensive explanation for a reference's disclosure of a limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional descriptions of that figure should be understood to be incorporated by reference as if set forth fully therein.

Except where specifically noted otherwise, this chart applies the apparent constructions of claim terms as used by Plaintiff in its infringement contentions; such use, however, does not imply that Defendant adopts or agrees with Plaintiff's constructions in any way.

U.S. Patent No. 6,408,193 (“the '193 Patent”) claims priority to Japanese Application No. 10-318689, filed November 10, 1998. For purposes of these invalidity contentions, Defendant applies the November 10, 1998, priority date for the '193 Patent. However, Defendant reserves the right to contest Plaintiff's reliance on the November 10, 1998, priority date, should the priority date become an issue in this proceeding.

Waldroup was filed on March 17, 1998 claiming priority to a provisional application filed on March 31, 1997. As such, Waldroup qualifies as prior art with regard to the '193 Patent under at least 35 U.S.C. § 102(e) (pre-AIA).

Geller was published in the 1989 IEEE MTT-S International Microwave Symposium Digest no later than June 15, 1989, and was presented at the 1989 IEEE MTT-S International Microwave Symposium no later than June 15, 1989. As such, Geller qualifies as prior art with regard to the '193 Patent under 35 U.S.C. § 102(a) and 102(b) (pre-AIA).

Using Plaintiff's interpretation of the claims, Waldroup in view of Geller renders obvious claims 1, 6, and 7 under 35 U.S.C. § 103(a).

Alternatively, Waldroup in view of Geller in further view of U.S. Patent No. 5,548,616 to Mucke, *et al.* (“Mucke”) renders obvious claims 1, 6, and 7 under 35 U.S.C. § 103(a). Mucke was filed on September 9, 1994 and issued on August 20, 1996. As such, Mucke qualifies as prior art with regard to the '193 Patent under 35 U.S.C. §§ 102(a), 102(b), and 102(e) (pre-AIA).

Alternatively, Waldroup in view of Japanese Unexamined Patent Application Publication No. JP H10-285059 to Nakayama (“Nakayama”) renders obvious claims 1, 6, and 7 under 35 U.S.C. § 103(a). Nakayama was published on October 23, 1998. As such, Nakayama qualifies as prior art with regard to the '193 Patent under 35 U.S.C. § 102(a) (pre-AIA).

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U.S. Patent No. 6,408,193	Waldroup in view of Geller
<i>Claim 1</i>	
<p>[1(pre)] A cellular telephone adapted to be used in a CDMA system, comprising:</p>	<p>To the extent the preamble is limiting, Waldroup teaches this limitation:</p> <p><i>The present invention relates generally to the field of radio communication, and more specifically, to the field of output power control in code division multiple access (CDMA) wireless telephones incorporating intermodulation (IM) spurious response attenuation.</i></p> <p>Waldroup at 1:13-17.</p> <p>Geller is directed to efficient transmission of RF signals, and contemplates the disclosed techniques may be used in communication applications:</p> <p><i>A fundamental goal of phased-array antenna development both for communications and radar applications is the realization of low-cost, high-efficiency active modules.</i></p> <p>Geller at p. 949, col. 1. Geller is thus both in the same field of endeavor as Waldroup (communications) and is reasonably pertinent to the problem being solved by Geller (output power control in CDMA networks).</p> <p>The '193 Patent further admits that CDMA cellular telephones are prior art:</p> <p><i>The typical standard for the CDMA cellular telephone system enacted in the U.S. is TIA IS-95 (hereinafter IS-95). An example of a transmitter applying IS-95 is shown in FIG. 11. In this example, a modulated signal converted into a transmitting frequency band is supplied to a variable amplitude amplifier 230 and the output of the variable amplitude amplifier 230 is further amplified by a power amplifier means 250 and transmitted to an antenna 450 through a duplexer 400. A controller 380 supplies a gain control signal to the variable amplitude amplifier 230 in order to adjust the gain such that the power transmitted from the antenna 450 will satisfy the required value of transmitting power. The gain control signal is also supplied to a level detecting means 390. The level detecting means 390 supplies a bias signal to the power amplifier means 250 for adjusting the transmitting power. The level detecting means 390 detects a level of the gain control signal, and as shown in FIG. 12, when the level is high (e.g. Gn), it outputs bias value of B2. Then the level decreases, and the level crosses a threshold value, the level detecting means 390 changes the bias abruptly from B2 to B1. Current of the</i></p>

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	<p><i>power amplifier means change abruptly when the gain level crosses the threshold value. In IS-95, open-loop power control and closed-loop power control are employed in order to regulate a receiving power at the cell-site station. The open-loop power control, which definitely determines a transmitting power according to an information indicating an intensity of electric field detected by a receiver, does not require a severe accuracy (generally within the range of 9.5 dB). On the other hand, the closed-loop power control performs fine control according to an information indicating a variation of a gain of the signal transmitted from the cell-site station (generally 1 dB step). In this case, the transmitter performs the open-loop power control at first, then it performs the closed-loop power control for the transmitted power to converge into a desired value which the cell-site station requires.</i></p> <p>'193 Patent at 1:24-59.</p>
<p>[1(a)] an antenna for receiving a first communication signal and a transmitting power control signal from a cell-site station and transmitting a second communication signal to the cell-site station,</p>	<p>Waldroup teaches this limitation. In particular, Waldroup teaches “antenna 26,” which receives radio signals:</p> <p><i>As a radio signal is received through an antenna 26, a duplexer 28 directs the signal to a variable attenuation stage 27 including a variable attenuator circuit 22 (discussed in greater detail below) through an RF signal input line 47.</i></p> <p>Waldroup at 8:10-13.</p> <p>This signal includes both power control data in addition to communication data:</p> <p><i>According to this first preferred embodiment of the present invention, this delay corresponds to the period of time between receiving closed loop power control information from the base station, such as 1.25 ms.</i></p> <p><i>Id.</i> at 15:9-13.</p> <p>Waldroup’s antenna also transmits a communication signal back to the cell-site station:</p> <p><i>A directional coupler 50 passes the RF signal through to the duplexer 28 which directs the RF 35 transmitter output signal to the antenna 26 for final output.</i></p> <p><i>Id.</i> at 8:33-35.</p>

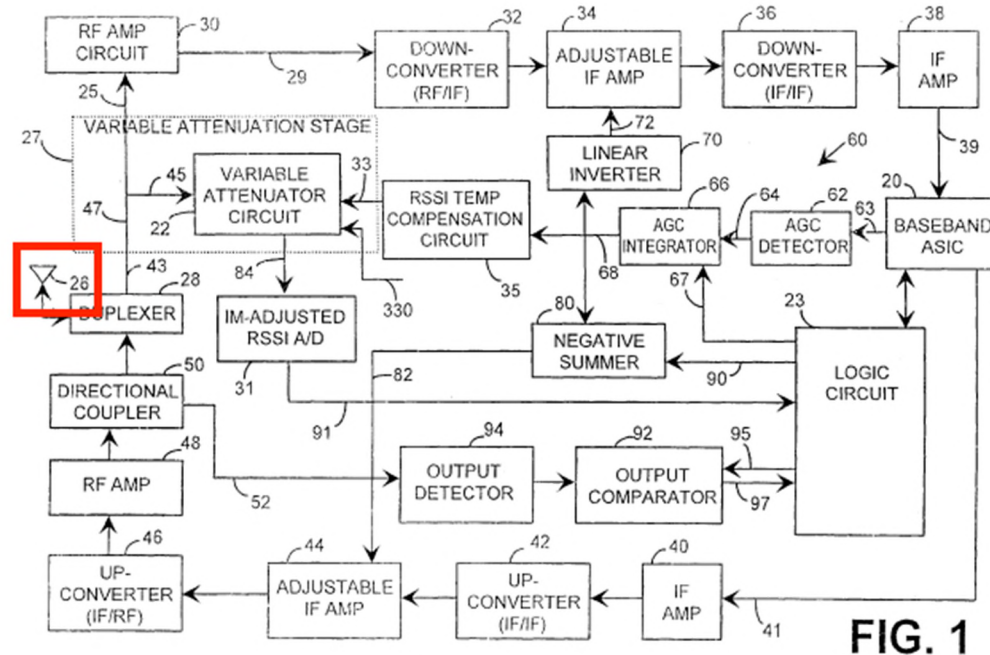
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FIG. 1

The '193 Patent further admits that CDMA cellular telephones, which necessarily include antennas, are prior art:

*The typical standard for the CDMA cellular telephone system enacted in the U.S. is TIA IS-95 (hereinafter IS-95). An example of a transmitter applying IS-95 is shown in FIG. 11. In this example, a modulated signal converted into a transmitting frequency band is supplied to a variable amplitude amplifier 230 and the output of the variable amplitude amplifier 230 is further amplified by a power amplifier means 250 and transmitted to an antenna 450 through a duplexer 400. A controller 380 supplies a gain control signal to the variable amplitude amplifier 230 in order to adjust the gain such that the power transmitted from the antenna 450 will satisfy the required value of transmitting power. The gain control signal is also supplied to a level detecting means 390. The level detecting means 390 supplies a bias signal to the power amplifier means 250 for adjusting the transmitting power. The level detecting means 390 detects a level of the gain control signal, and as shown in FIG. 12, when the level is high (e.g.*

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