

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JUN WANG and LING HANG

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Appeal 2007-1115  
Application 10/150,145  
Technology Center 2600

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| Decided: June 29, 2007

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Before JOSEPH L. DIXON, ALLEN R. MACDONALD, and  
JEAN R. HOMERE, *Administrative Patent Judges*.

DIXON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 2-12. Claim 1 has been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

## BACKGROUND

Appellants' invention relates to a method and apparatus for soft handoff between base stations using different frame formats. An understanding of the invention can be derived from a reading of exemplary claim 2, which is reproduced below.

2. In a wireless communication system, a method for soft handoff between first and second base stations using different signaling frame formats, comprising:

initiating a soft handoff from a first base station to a second base station, wherein a protocol data unit format revision in use by the first base station is lower than a protocol data unit format revision in use by the second base station;

configuring the second base station to communicate at the lower protocol data unit format revision of the first base station;

directing a mobile station to upgrade, at an action time, to a mobile protocol data unit format revision associated with the higher protocol data unit format revision in use by the second base station before configuration;

completing the soft handoff to the second base station;

reconfiguring the second base station to communicate at the higher protocol data unit format revision in use by the second base station before configuration; and

exchanging signaling frames between the mobile station and the second base station using the higher protocol data unit format revision in use by the second base station before configuration.

#### PRIOR ART

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Gilhousen	5,101,501	Mar. 31, 1992
Czaja	6,567,666 B2	May 20, 2003
(filed May 20, 1999)		

#### REJECTIONS

Claims 2-7 are rejected under 35 U.S.C. 102 as being anticipated by Czaja.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen in view of Czaja.

Rather than reiterate the conflicting viewpoints advanced by the Examiner and the Appellants regarding the above-noted rejection, we make reference to the Examiner's Answer (mailed Oct. 20, 2006) for the reasoning in support of the rejections, and to Appellants' Brief (filed Jul. 12, 2006) and Reply Brief (filed Dec. 20, 2006) for the arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to Appellants' Specification and claims, to the applied prior art

references, and to the respective positions articulated by Appellants and the Examiner. As a consequence of our review, we make the determinations that follow.

35 U.S.C. § 102

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

With respect to independent claims 2 and 5, Appellants' main contention is that Czaja does not teach configuring the second base station to a lower protocol data unit format revision and reconfiguring the second base station back to the higher protocol data unit format revision (Reply Br. 2-3). The Examiner maintains that Czaja teaches the configuring and reconfiguring the second base station because the IS-2000 standard (3G) is backwards compatible with the IS-95 standard (2G). We agree with Appellants because Czaja teaches the use of back compatibility from the 3G(IS-2000) network to the 2G(IS-95-A/B) network, but only discusses it with respect to the mobile unit. Czaja teaches that the mobile unit receives both the 2G and the 3G signals using a rake transceiver which uses at least a finger to receive signals from each generation station. (Czaja, cols. 3-4). The mobile unit then performs the soft handoff between each of the two generations base stations without the base stations having to be modified.

While Czaja does discuss that the base stations may be either 2G or 3G, Czaja does not discuss how the 3G base station would use its backwards compatibility. The Examiner cites to limited portions of Czaja in the rejection. We have reviewed those cited portions of Czaja and do not find

any express teaching of configuring and reconfiguring the base station. Rather, we find that col. 5, lines 41-47, tends to suggest that the mobile unit receives and processes each generation's signals without configuring and reconfiguring either base station. Therefore, we find that the Examiner has not established the requisite initial showing of all the claimed elements. Therefore, we cannot sustain the rejection of independent claims 2 and 5 and their dependent claims 3, 4, 6, and 7.

35 U.S.C. § 103

With respect to the role of the Examiner as finder of fact, the Court of Appeals for the Federal Circuit has stated: “the examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The Court of Appeals for the Federal Circuit has also noted: “[w]hat the prior art teaches, whether it teaches away from the claimed invention, and whether it motivates a combination of teachings from different references are questions of fact.” *In re Fulton*, 391 F.3d 1195, 1199-1200, 73 USPQ2d 1141, 1144 (Fed. Cir. 2004) (internal citations omitted). In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). Furthermore, “‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged

claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

With respect to independent claim 8, we find that this claim is directed to a mobile station that is upgraded or downgraded in accordance with received messages. We find that our previous discussion of Czaja shows that the mobile station of Czaja configures its “rake” receiver to receive the 2G signal from a base station in a 2G/3G handoff and then may reconfigure the fingers of the receiver to the 3G base stations afterwards. Therefore, we find that the backwards compatibility of the 3G mobile station would have had “a memory coupled to the control processor having code or instructions for directing the control processor to upgrade or downgrade a mobile protocol data unit format revision in use during soft handoff according to received messages” which would have modified the rake receiver and the processing of the received signal accordingly. Therefore, we will sustain the rejection of independent claim 8 over the combination of Gilhousen in view of Czaja.

With respect to independent claims 9-12, we find that each independent claim recites limitations that the base station configures or downgrades the protocol data unit revision format to communicate at a lower protocol data unit revision format. As discussed above, we find that Czaja does not teach reconfiguring the base station and from our review of the teachings of Gilhousen, we agree with the Appellants that Gilhousen does not remedy the deficiency (Br. 14). Therefore, we find that the Examiner has not established the requisite initial showing of all the claimed elements

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in the combined teachings of Gilhousen and Czaja. Therefore, we cannot sustain the rejection of independent claims 9-12.

#### CONCLUSION

To summarize, we have not sustained the rejection of claims 2-7 under 35 U.S.C. § 102; we have sustained the rejection of claim 8 under 35 U.S.C. § 103(a); and we have not sustained the rejection of claims 9-12 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

#### AFFIRMED-IN-PART

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