

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER D. KARABINIS

Appeal No. 2000-2253
Application No. 08/798,137

ON BRIEF

Before JERRY SMITH, GROSS, and BARRY, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

A patent examiner rejected claims 1-18. The appellant appeals therefrom under 35 U.S.C. § 134(a). We reverse.

BACKGROUND

The appellant's invention is a satellite communication ("SATCOM") system operating in a "mobile-to-mobile" mode in which mobile telephones communicate via a satellite. In a typical SATCOM system operating in a mobile-to-mobile mode, mobile telephones transmit communication signals at a first carrier bandwidth (e.g., 50 kHz) and receive communication signals at a second carrier bandwidth (e.g., 200 kHz).

A rate converter in a satellite converts signals between the carrier bandwidths. (Spec. at 2.) The converter, however, adds weight, cost, and complexity to the satellite. (*Id.*)

In contrast, the appellant's mobile telephone features two receiver paths and a switch. In a Public Switched Telephone Network-to-mobile mode, the switch selects the first receiver path to receive signals at a first carrier bandwidth (e.g., 200 kHz). In a mobile-to-mobile mode, the switch selects the second receiver path to receive unconverted signals at second carrier bandwidth (e.g., 50 kHz), without requiring conversion to the first bandwidth. Because the mobile telephone can receive signals at different carrier bandwidths, the appellant asserts that the associated satellite need not include a rate converter. (*Id.* at 5.)

A further understanding of the invention can be achieved by reading the following claim:

14. A communication device, comprising:

a first receiver path for receiving communication signals from a satellite at a first carrier bandwidth in a first mode;

a second receiver path for receiving communication signals from the satellite at a second carrier bandwidth in a second mode;

means for selecting between the first mode and the second mode in response to control information.

Claims 1, 2, 5, 6, 8-11, 14, 16, 18 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,619,525 (“Wiedeman”). Claims 3, 4, 7, 12, and 17 stand rejected under 35 U.S.C. § 103(a) as obvious over Wiedeman in view of U.S. Patent No. 5,579,319 (“Daniel”). Claims 13 and 15 stand rejected under § 103(a) as obvious over Wiedeman in view of U.S. Patent No. 5,539,730 (“Dent”).

OPINION

Rather than reiterate the positions of the examiner or appellant *in toto*, we address the main point of contention therebetween. The examiner asserts, “Wiedeman teaches mobile terminals may be dual use devices (capable of operating in full duplex mode, i.e., L-band RF links and S-band RF links).” (Examiner’s Answer at 6.) The appellant argues, “[t]he bandwidths of the S and L band links . . . encompass the *same* bandwidth of 16.5MHz and not different bandwidths as claimed.” (Reply Br. at 3.)

“Analysis begins with a key legal question -- *what* is the invention *claimed*?” *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, “the Board must give claims their broadest reasonable construction. . . .” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000). “Moreover, limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed.

Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Here, independent claim 1 specifies in pertinent part the following limitations: "the system operates in a first mode, in which each device transmits signals to the satellite at a first carrier bandwidth and receives signals from the satellite at a second carrier bandwidth, and selectively operates in a second mode, in which each device transmits signals to the satellite and receives signals from the satellite at the first carrier bandwidth." Similarly, independent claim 8 specifies in pertinent part the following limitations: "establishing, in a first mode of operation, a first communication link between a first communication device, a satellite, a control station associated with the satellite, and a second communication device, the first communication device transmitting signals to the satellite at a first carrier bandwidth and the second communication device receiving signals at a second carrier bandwidth; [and] establishing, in a second mode of operation, a second communication link between the first communication device, the satellite, and a second communication device, the first communication device transmitting signals to the satellite at the first carrier bandwidth and the second communication device receiving signals from the satellite at the first carrier bandwidth." Similarly, independent claim 14 specifies in pertinent part the following limitations: "a first receiver path for receiving communication signals from a

satellite at a first carrier bandwidth in a first mode; [and] a second receiver path for receiving communication signals from the satellite at a second carrier bandwidth in a second mode. . . .” Giving the independent claims their broadest, reasonable construction, the limitations require that a device receive communication signals from a satellite at different carrier bandwidths in different modes.

“[H]aving ascertained exactly what subject matter is being claimed, the next inquiry must be into whether such subject matter is novel.” *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). “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) (citing *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 715, 223 USPQ 1264, 1270 (Fed. Cir. 1984); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983); *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983)). “[A]bsence from the reference of any claimed element negates anticipation.” *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Here, Wiedeman “permit[s] low-powered fixed or mobile user terminals 13 to communicate via . . . satellites 12. . . .” Col. 4, ll. 19-20. “[T]he user terminals 13 may be capable of operating in a full duplex mode and communicate via, by example, L-band RF links (uplink or return link 17b) and S-band RF links (downlink or forward link 17a) through return and forward satellite transponders 12a and 12b, respectively.” *Id.* at ll. 57-62. The examiner fails to show, however, that the user terminals receive communication signals from the satellites at different carrier bandwidths. To the contrary, the reference teaches that the S-band link, via which the user terminals receive communication signals from the satellites, features a single, fixed bandwidth. Specifically, “[t]he forward S band RF links 17a may operate within . . . a bandwidth of 16.5 MHz.” Col. 4, l. 67 - col. 5, l. 1. The absence of such a showing negates anticipation. Therefore, we reverse the anticipation rejection of claim 1 and claims 2, 5, and 6, which fall therewith; of claim 8 and claims 9-11, which fall therewith; and of claim 14 and claims 16 and 18, which fall therewith.

“In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness.” *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993)(citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)). “A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested

the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, the examiner fails to allege, let alone show, that the addition of Daniel or Dent cures the deficiency of Wiedeman. Absent a teaching or suggestion that a device receives communication signals from a satellite at different carrier bandwidths in different modes, the examiner fails to present a *prima facie* case of obviousness. Therefore, we reverse the obviousness rejection of claim 3, 4, 7, 12, 13, 15, and 17.

CONCLUSION

In summary, the rejections of claims 1, 2, 5, 6, 8-11, 14, 16, 18 under § 102(e) and of claims 3, 4, 7, 12, 13, 15, and 17 under § 103(a) are reversed.

REVERSED

JERRY SMITH
Administrative Patent Judge

ANITA PELLMAN GROSS
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

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