

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 40

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BENGT Y. PERSSON, BJORN GUDMUNDSON and PAUL W. DENT

Appeal No. 2000-1557
Application 08/384,456

ON BRIEF

Before HAIRSTON, KRASS, and JERRY SMITH, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-52, which constituted all the claims in the application. The brief on appeal withdrew the appeal with respect to claims 23-48 and these claims were cancelled. In response to the filing of the appeal

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brief, the examiner has withdrawn the rejection of claims 2, 5, 16, 49 and 51. Therefore, this appeal is now directed to the rejection of claims 1, 3, 4, 6-15, 17-22, 50 and 52.

The disclosed invention pertains to the field of cellular mobile communications systems. Specifically, the invention relates to a method and apparatus for controlling communications between at least one mobile station and at least two base stations.

Representative claim 1 is reproduced as follows:

1. In a cellular mobile radio communications system including at least one mobile station and at least two base stations, a method of communicating with said mobile station from a first and a second of said base stations comprising the step of:

transmitting a signal on a first frequency from said first base station to said mobile station using a waveform encoded with a first code;

sending a transfer indication from said first base station to said second base station which commands the second base station to begin communicating with said mobile station;

after receiving said transfer indication, transmitting a signal on said first frequency from said second base station to said mobile station using a waveform encoded with a second code which is different from said first code; and

receiving at said mobile station said signals transmitted on said first frequency from said first and second base stations and decoding said signals using said first and second codes to produce a first and a second demodulated signal.

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The examiner relies on the following references:

Gilhousen et al. (Gilhousen)	5,109,390	Apr. 28, 1992
Falconer et al. (Falconer)	5,159,608	Oct. 27, 1992
Blakeney, II et al. (Blakeney)	5,267,261	Nov. 30, 1993
Gudmundson	5,295,153	Mar. 15, 1994

The following rejections remain on appeal before us:

1. Claims 50 and 52 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a manner as to reasonably convey to the artisan that the inventors, at the time this application was filed, had possession of the claimed invention.

2. Claims 14, 15 and 52 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Blakeney.

3. Claims 7-9 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Blakeney and Falconer.

4. Claims 1, 3, 4, 6, 10-13 and 50 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Blakeney.

5. Claims 18-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Blakeney and Gudmundson.

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Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the prior art rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the disclosure does not support the invention now recited in claims 50 and 52. We are also of the view that the prior art evidence relied upon by the examiner supports the rejection of claims 1, 3, 4, 6-15, 17-19, 50 and 52. We reach the opposite conclusion with respect to claims 20-22. Accordingly, we affirm-in-part.

We consider first the rejection of claims 50 and 52 as being based on an inadequate disclosure. The examiner finds that the original specification fails to disclose the error correcting

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step including combination of the first and second demodulated signals within or subsequent to the determination by the error correction decoding process of the data most likely transmitted [answer, page 3]. Appellants simply respond that the claimed phrase is fully supported by the disclosure and original claim 6 [brief, page 6]. The examiner responds that the portion of the disclosure relied on by appellants and original claim 6 are totally silent about the phrase in question [answer, pages 10-11].

We agree with the position argued by the examiner. The rejection is based on the written description requirement of 35 U.S.C. § 112. The purpose of the written description requirement is to ensure that the applicants convey with reasonable clarity to those skilled in the art that they were in possession of the invention as of the filing date of the application. For the purposes of the written description requirement, the invention is "whatever is now claimed." Vas-cath, Inc. v. Mahurkar, 935 F.2d 1555, 1564, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). We have considered the record, and we cannot find clear support for the recitation that the error correcting step includes combination of said first and second demodulated signals "within or subsequent to" the determination

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by the error correction decoding process of the data most likely transmitted. Therefore, we sustain this rejection of claims 50 and 52.

We now consider the rejection of claims 14, 15 and 52 under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Blakeney. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The examiner indicates how he finds the invention of these claims to be fully met by the disclosure of Blakeney [answer, page 4]. With respect to claim 14, appellants argue that Blakeney does not describe a post-detect combining wherein the first and second signals are decoded to produce first and second demodulated signals [brief, pages 7-8]. The examiner explains that the signal received at a mobile station is demodulated by receivers 40 and 42 and then decoding is performed

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in the decoder 48. Thus, the examiner reads the first and second demodulated signals on the outputs of the receivers 40 and 42 [answer, pages 12-13].

We agree with the examiner for the reasons given in the response to arguments section of the answer. Since receivers 40 and 42 correlate the IF samples with the proper PN sequence, we find that this operation constitutes a demodulation of the incoming signals. Therefore, we sustain this rejection of claim 14.

With respect to claim 15, appellants argue that the cited portion of Blakeney does not indicate that the base station identifications are used in the same manner as the claimed first and second codes. The examiner responds by further explaining how he finds anticipation in the disclosure of Blakeney [answer, pages 13-14]. We agree with the examiner that this further explanation of the rejection indicates that the invention of claim 15 is fully met by the disclosure of Blakeney. Since appellants have not pointed out the flaw, if any, in this further explanation, we sustain this rejection of claim 15.

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With respect to claim 52, appellants argue that Blakeney operates in the opposite manner from the claimed invention [brief, page 9]. The examiner responds that Blakeney meets the within portion of the claimed phrase "within or subsequent to" [answer, pages 14-15]. We again agree with this interpretation of the examiner. Since appellants have not responded to this particular finding of the examiner, we sustain this rejection of claim 52.

We now consider the rejections of the claims under 35 U.S.C. § 103. 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 is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044,

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1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

We consider first the rejection of claims 7-9 and 17 based on the teachings of Blakeney and Falconer. These claims stand or fall together as a single group [brief, page 5]. The examiner finds that Blakeney teaches the claimed invention except for the encoding of each of the transmitted signals with a different scrambling code. The examiner cites Falconer as teaching the use of unique scrambling codes to eliminate cross talk and make it difficult to eavesdrop or track calls. The examiner finds that it would have been obvious to the artisan to use the scrambling codes of Falconer in the communications system of Blakeney [answer, pages 5-6].

Appellants argue that there is no indication that problems exist in Blakeney which could be solved by use of different scrambling codes as claimed. Appellants also argue that Blakeney does not teach the use of signal strengths as claimed [brief, pages 10-12]. The examiner responds that different scrambling codes enhance the security of a communications system as taught by Falconer. The examiner also responds that the recitations of claim 7 are broad enough to read on the transmission of signal strengths as disclosed by Blakeney [answer, pages 15-16].

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We agree with the position of the examiner as set forth in the response to arguments section of the answer. Since appellants have not addressed these specific findings of the examiner, we sustain this rejection of claims 7-9 and 17.

We now consider the rejection of claims 1, 3, 4, 6, 10-13 and 50 based on the teachings of Blakeney taken alone. The examiner indicates how he finds obviousness on pages 6-8 of the answer. With respect to claim 1, appellants argue that Blakeney does not use first and second codes as claimed. Specifically, appellants argue that using different phase offsets of a single code is not the same as using different codes. Appellants also argue that first and second demodulated signals are not generated by the receiver [brief, pages 12-14]. With respect to the first argument, the examiner responds that the different phase offsets in Blakeney result in different codes as broadly recited in claim 1. We agree with this position for the reasons indicated by the examiner [answer, pages 17-18]. With respect to the second argument, the examiner notes that this is the same argument discussed above with respect to claim 14. For reasons discussed above with respect to claim 14, this argument is also not persuasive of error in this rejection. Therefore, we sustain this rejection of claims 1, 3 and 4.

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With respect to claim 6, appellants argue that Blakeney does not teach or suggest combining symbols from demodulated signals as claimed. The examiner points to portions of Blakeney which suggest combining symbols as claimed. Since the examiner's position in the response to arguments section of the answer is persuasive, and since appellants have not specifically addressed this response, we sustain this rejection of claim 6.

With respect to claim 10, appellants argue that Blakeney does not teach the three different codes of claim 10. The examiner responds by indicating how he reads the three codes on the disclosure of Blakeney [answer, page 19]. Since this reading of the examiner establishes a prima facie case of obviousness, and since appellants do not respond to this specific reading of the examiner, we sustain this rejection of claim 10.

With respect to claims 11-13, appellants argue that the claimed combination of codes is not taught or suggested by Blakeney. The examiner responds by explaining how the combination of codes is specifically met by Blakeney [answer, page 19-20]. Once again, this specific explanation by the examiner establishes a prima facie case of obviousness which has not been persuasively rebutted by appellants. Therefore, we sustain this rejection of claims 11-13. With respect to claim

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52, appellants make the same arguments we considered above with respect to claim 52. Therefore, we also sustain this rejection of claim 50.

We now consider the rejection of claims 18-22 based on Blakeney and Gudmundson. The examiner indicates how he finds obviousness on pages 8-10 of the answer. With respect to claims 18 and 19, appellants argue that the soft handoff techniques of Blakeney are different from those claimed for reasons discussed above with respect to claim 1. Appellants also argue that only their own disclosure teaches using subtractive demodulation during soft handoff. The examiner notes the arguments discussed above with respect to claim 1 and responds that Gudmundson teaches the use of subtractive demodulation during handoff [answer, pages 21-22]. We agree with the examiner for reasons discussed above and for the reasons given by the examiner in the answer. Therefore, we sustain this rejection of claims 18 and 19.

With respect to claims 20-22, appellants argue that the examiner has improperly relied on appellants' own disclosure to support the rejection [brief, page 17]. The examiner responds

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that the conventional power control disclosed by appellants in combination with the desire to reduce interference would have suggested the invention of claims 20-22.

We will not sustain the rejection of claims 20-22. We agree with appellants that the examiner's reliance on appellants' own disclosure as providing prior art to support the rejection is improper.

In summary, the examiner's rejection of claims 50 and 52 under 35 U.S.C. § 112 is sustained. The examiner's rejection of claims 14, 15 and 52 under 35 U.S.C. § 102 is sustained. The examiner's rejection of claims 1, 3, 4, 6-13, 17-22 and 50 is sustained with respect to claims 1, 3, 4, 6-13, 17-19 and 50 but is not sustained with respect to claims 20-22. Accordingly, the decision of the examiner rejecting claims 1, 3, 4, 6-15, 17-22, 50 and 52 is affirmed-in-part.

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

AFFIRMED-IN-PART

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	
Administrative Patent Judge)	APPEALS AND
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