

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOCHIRO MINAMI

Appeal No. 1999-0297
Application No. 08/502,253

HEARD: April 12, 2001

Before HAIRSTON, GROSS, and LEVY, Administrative Patent Judges.
LEVY, 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 1-27, which are all of the claims pending in this application.

BACKGROUND

The appellant's invention relates to a selective call system for reducing power consumption in remote pagers. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. A method for transmitting data from a transmitter to a plurality of receivers, the method comprising the steps of:

at the transmitter,

(a) transmitting first signals each having a first time period which is divided into a plurality of frames,

each of the frames comprising:

a synchronization field;

an address field comprising a plurality of addresses associated with the receivers, respectively; and

a message field comprising a plurality of messages corresponding to the addresses, respectively, each of the messages comprising a message and a message header which includes an address transmission number of an address corresponding to the message, said address transmission number indicating a transmission order of each of the addresses within said address field, and

at each of the receivers,

(b) receiving a frame of at least one of the first signals;

(c) sequentially searching the address field for an address of the receiver itself while incrementing an address count at each address searched;

(d) storing the address count when the address of the receiver itself is found; and

(e) selecting a message addressed to the receiver itself from the message field by comparing the address count stored with the address transmission number included in the message header.

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

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|--------------------------------|-----------|----------|
| DeLuca et al. (DeLuca) 1992 | 5,089,813 | Feb. 18, |
| Kane et al. (Kane) 1994 | 5,315,635 | May 24, |

Claims 1-27 stand rejected under 35 U.S.C. § 103 as being unpatentable over DeLuca in view of Kane.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejection, we make reference to the examiner's answer (Paper No. 15, mailed July 17, 1998) for the examiner's complete reasoning in support of the rejection, and to appellant's brief (Paper No. 14, filed June 23, 1998) and reply brief (Paper No. 17, filed September 17, 1998) for appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 1-27. Accordingly, we reverse.

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, 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. 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).

We begin with claim 1. The examiner takes the position (answer, page 5) that DeLuca teaches all of the claim limitations, with the exception of "a message header having a message which includes an associated address transmission number and comparing an address count with the address transmission number." To overcome this deficiency of DeLuca, the examiner relies upon Kane for a teaching (answer, page 6) of "a message which includes an associated message sequence number (address transmission number) and compare[s] such with an address count." According to the examiner (answer, paragraph bridging pages 5 and 6) "one skilled in the art recognizes there must be some means of associating an address count and a message sequence number. One such means would be to compare the count with the number."

Appellant asserts (brief, page 4) that DeLuca and the present invention are directed to a system which sends multiple messages grouped in a frame, whereas Kane is directed to an entirely different transmission system which sends and

receives only one message at a time. Appellant notes (brief, page 5) that in Kane, each of the sequence numbers represents a single message addressed to a specific receiver. In contrast to Kane, appellant's invention provides for each of the address transmission numbers to correspond with a message in a received frame of messages, which could be addressed to any receiver. According to appellant (brief, page 4), because of this fundamental difference of sending multiple messages in a frame versus sending single messages, Kane does not suggest the claimed feature missing from DeLuca.

We find that DeLuca discloses (col. 1, lines 6-9) a selective call receiver, such as a pager. Messages are grouped into corresponding address and information fields by base station transmitter 50 (Figure 1 and col. 2, line 65 - col. 3, line 10). Upon receiving a message having an address matching the paging receiver, the message may be stored in message memory 60 after being decoded by a microcomputer in decoder 58. The message sequence of each data packet (Figure 3 and col. 3, lines 44-55) begins with a 2 digit format signal. A "00" format signal reflects that no additional information associated with the message follows. A "01"

format signal reflects a continuation signal, indicating that the following packet contains additional information associated with the message. Figure 4a discloses a selective call signal protocol received by a pager. It includes (col. 3, line 67 - col. 4, line 14) a synchronization signal, as well as address and data fields. The address field has a predetermined number of address slots. Additionally, the data field contains a corresponding number of data packets. If the pager receives the signal of Figure 4a and finds its own address, i.e., A1, it receives the associated message information only in the data packet D1, in the data field. However, in DeLuca, a message is not selected by comparing an address count with an address transmission number that is stored in the message header by the transmitter. In DeLuca, (Figure 5) the program sequentially increments through each address searched (step 210). If the address of the selective call receiver is found, step 208 is executed, setting the program to receive the data packet corresponding to the address count. After incrementing through each address to see if the address corresponds to the pager, the messages are sequentially incremented in a similar fashion (steps 218, 220,

222, and 226). The incremented number of the packet is compared with the incremented number of the address, i.e., if the third address corresponds to the address of the pager, the third data packet is received. From these teachings of DeLuca, we find that DeLuca selects a data packet corresponding to the pager address by incrementing sequentially through each of the messages until the packet to be received is reached.

We find that in Kane, central terminal 102 stores messages for transmission to a selective call receiver. The messages are sent and received sequentially (col. 2, lines 45-48). Each message 200 includes identification and control information 202, as well as data information 204. The identification and control information includes, inter alia, address information 206, message sequence number 208, and message repetition count 210 (Figure 2). Each of the messages for a selected call receiver are given a message sequence number which identifies the relative sequence of the message in the transmission sequence (col. 8, lines 39-44). The message sequence numbers for the received messages are put into a linked list (Figure 3) and are ordered according to

their transmission sequence number (col. 10, lines 2-11 and 24-28). To ensure that all of the messages sent by the central terminal have been received, the messages may be resent. Upon receiving a message corresponding to the selective call receiver, 130, the message is stored in memory 140 (col. 8, lines 20-23). If, after a predetermined period of time, a message in the sequence has not been received, a message reconciliation request is sent to central terminal 102 through path 152 (col. 7, lines 28-35) and the message is resent (Figure 10 and col. 13, line 58 - col. 14, line 33).

From these teachings of Kane, we find that because Kane sequentially transmits and receives each message, Kane does not select a message by comparing an address count with an address transmission number that is stored in the message header. In Kane, if the address of the message corresponds to the address of the selective call receiver, the message is stored. We find that Kane uses message sequence numbers because the messages are sequentially transmitted. The message sequence numbers ensure that all of the messages have been received and are properly ordered. Because DeLuca transmits messages that are grouped together, we see no

teaching or suggestion, nor has any persuasive line of reasoning been provided by the examiner, for utilizing transmission sequence numbers in DeLuca and then comparing the address count with the transmission sequence number in order to select a message. We find that DeLuca and Kane teach away from the proposed combination advanced by the examiner because of their different methods of transmission, i.e., grouped messages versus single messages sent sequentially. We additionally find that DeLuca and Kane teach away from the claimed invention because Kane teaches providing a separate sequence for each selective call receiver, whereas in DeLuca, each signal received, as shown in Figure 4a, includes addresses and message data intended for more than one selective call receiver.

The examiner asserts (answer, page 9) that "one skilled in the art recognizes including a means for associating an address count with address transmission number would be to compare the two for the purpose indicating a transmission order of each addresses within the message field." Our reviewing court has stated that "[o]bviousness may not be established using hindsight or in view of the teachings or

suggestions of the inventor." Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d 1087, 37 USPQ 2d at 1239 (Fed. Cir. 1995), citing W. L. Gore & Assocs., v. Garlock, Inc., 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13 (Fed. Cir. 1983). We find the examiner's assertion of what is known by one of ordinary skill in the art to be conclusionary and unsupported by evidence. From our review of the record, we find no suggestion, other than from appellant's disclosure, of replacing the incremental sequencing of the messages with a message sequence in a message header, and then comparing the address count with the transmission number stored in the message header. Accordingly, we conclude that the examiner has failed to establish a prima facie case of obviousness with respect to claim 1.

With respect to the other independent claims 9, 12, 17, and 22, we note that appellant asserts (brief, page 4) that all of the independent claims include selecting a message by comparing an address count with an address transmission number that is stored in the message header by the transmitter. We find that independent claims 12, 17, and 22 contain language similar to claim 1. Accordingly, we find that the examiner

has failed to establish a prima facie case of obviousness with regard to independent claims 12, 17, and 22. Upon review of claim 9, we find that the claim 9 is directed toward a method of signal transmission from a transmitter to a plurality of receivers, and therefore does not recite comparing a stored address count with the address transmission number included in the message header, as the "comparing" takes place in the selective call receiver. Turning to claim 9, we find that even though the claim does not recite comparing a stored address count with the address transmission number included in the message header, we find that claim 9 contains language regarding the message frame that is neither taught nor would have been suggested by the combined teachings of DeLuca and Kane. For the reasons discussed, supra, we find that the limitation of claim 9 that the message header "includes the address transmission count of an address signal corresponding to the message signal, said address transmission count indicating a transmission order of each of the addresses within said address field" is not taught or suggested by DeLuca considered with Kane. We therefore conclude that the examiner has failed to establish a prima facie case of

obviousness of independent claim 9. As the rejection of each of the independent claims has been reversed, the rejection of each of the claims dependent upon independent claims 1, 9, 12, 17, and 22 is also reversed. Accordingly, the decision of the examiner to reject claims 1-27 under 35 U.S.C. § 103 as unpatentable over the combined teachings of DeLuca and Kane is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-27 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON)
Administrative Patent Judge)
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) BOARD OF PATENT
ANITA PELLMAN GROSS) APPEALS

Administrative Patent Judge) AND
) INTERFERENCES
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