

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JEFFREY BROWNLEE
and KNUT I. HABERLAND-SCHLOSSER

Appeal No. 1999-1551
Application No. 08/547,736

ON BRIEF

Before HAIRSTON, KRASS and DIXON, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

This is a decision on appeal from the final rejection of claims 1-21, all of the pending claims.

The invention is directed to a radio telephone system. More particularly, in a digital cordless radio telephone system, a technique is provided for transmitting a page message from the base station that identifies no particular handset, thereby causing all of the

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handsets to be alerted to an incoming call. By using the disclosed broadcast type of communication, the base station is enabled to cause multiple handsets to simultaneously generate a ringing signal that alternately goes on and off, thereby alerting multiple users of the occurrence of the incoming call to be answered. Previously, it would have been necessary to transmit a paging signal that was directed specifically to each individual handset to inform each handset of the incoming call. For N handsets, this would require 2N time slots. If 2N time slots were not available, then not all of the handsets could be notified of the incoming call. This problem is said to be overcome by the instant invention.

Representative independent claim 1 is reproduced as follows:

1. A base station for a digital cordless radio telephone system comprising at least one handset, the base station comprising base station communication means for transmitting signals to the handset; and base station processing means responsive to an incoming call to the base station for causing the base station communication means to transmit a page request signal of a type that specifies no single handset.

The examiner relies on the following references:

Connolly et al. (Connolly)	5,325,419	Jun. 28, 1994
Krebs et al. (Krebs)	5,548,631	Aug. 20, 1996 (filed Oct. 1, 1993)
Barnes et al. (Barnes)	5,613,196	Mar. 18, 1997 (filed Sept. 2, 1994)

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Claims 1-21 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner offers Connolly and Krebs with regard to claims 1-4, 6-8, 11-14 and 20, adding Barnes to this combination with regard to claims 5, 9, 10, 15-19 and 21.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

With regard to independent claim 1, the examiner explains, in Paper No. 4, that Connolly discloses a base station for a DECT-like radio telephone system comprising at least one handset (identifying Figure 1 and column 7, lines 44-49) and comprising a base station processing means, Figure 1, column 8, lines 24-30, which is responsive to an incoming call for causing the base station communicating means to transmit a signal analogous to an {LCE-PAGE-REQUEST}, identifying Figure 1, Figure 7 and column 11, lines 6-27. See page 3 of Paper No. 4.

It is the examiner's position that Connolly discloses the invention but for Connolly's paging signal specifying the handset for which the message is intended.

Similarly, with regard to independent claim 14, the examiner contends that Connolly discloses a handset which comprises a handset communication means for receiving signals (Figure 1 and Figure 3), an alerting means (Figure 12 and column 11, lines 37-40) and a handset processing means responsive to the handset communication means receiving signals analogous to an {LCE-PAGE-REQUEST}, identifying Figure 1, Figure 12 and column 15, lines 25-47. Again, the examiner identifies the difference between the invention and Connolly as the latter's paging signal identifying the handset for which the message is intended.

With regard to independent claims 1 and 14, the examiner argues that the instant claimed subject matter as a whole would have been obvious since it "is often useful not to specify a single handset in setting up a call, as in the case of dispatch operations. In this way, only the mobile units which are not presently busy will answer the page. Krebs teaches such a system in which no single handset is specified" [Paper No. 4-pages 3 and 5, the examiner citing Figure 9, #907, and column 6, lines 45-60 of Krebs). The examiner then concludes that it would have been obvious to not specify a single handset as taught by Krebs, in conjunction with the system taught by Connolly.

For their part, appellants argue that Krebs does not specifically teach the

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transmission of a single page request, within a given base station coverage area, that is directed to more than one communication unit because in the example given by Krebs, there is only one communication unit in a given zone. Citing columns 7 and 8, lines 61-62 and 9-19 of Krebs, respectively, appellants argue that Krebs' page request is sent to each access control gateway, where each access control gateway sends a single page request to a target communication unit. [see page 6 of the principal brief].

First, in a rejection under 35 U.S.C. § 103, a reference need not *specifically* teach a certain feature if that claimed feature is clearly *suggested* by the prior art. In the instant case, we agree with the examiner that Krebs at least suggests the transmission of a single page request, within a given base station coverage area, that is directed to more than one communication unit. Column 6, line 46 through column 7, line 25, and the portions of columns 7 and 8 cited by appellants at least suggest that there may be a single base station sending a page request to several communication units (e.g. handsets), e.g., column 8, lines 11-12 states that the access control gateway sends a page request to "an associated base station at the respective site, which request is then repeated to corresponding communication units."

Furthermore, even appellants [at page 6 of the principal brief] identify column 1,

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lines 20-23, of Krebs, wherein, in describing the prior art, Krebs indicates that “dispatch communications allow for communications amongst a group of users, without a need to individually identify each group member before initiating communication.” Thus, Krebs suggests a general paging system from a single base unit to several handset, or communication units, as broadly set forth in instant independent claims 1 and 14. The question remains, however, as to whether the combination of Connolly and Krebs is proper and whether such a combination, if proper, would result in the instant claimed subject matter, within the meaning of 35 U.S.C. § 103.

Appellants argue that Connolly is concerned with a page request directed to a single portable handset and that Krebs is directed to a combined system for providing both telephone services and trunked dispatch services which are independent of one another. Therefore, any page message in Krebs capable of identifying more than one communication unit would be generated via the trunked dispatch system, not through the independent telephone service system, and this seems to us to be an accurate assessment of Krebs.

Thus, appellants conclude [principal brief-page 8], any combination of Connolly and Krebs would merely result in a replacement of the cellular telephone system portion of

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Krebs with the PCS system of Connolly, still leaving the trunked dispatch system as an independent system. Therefore, in appellants' assessment, any capability to notify more than one communication unit at a time with a page request signal, if it exists at all, would be limited to the trunked dispatch system portion of the hybrid system. According to appellants, there is no suggestion to modify only the PCS system of Connolly so as to provide a setup or alerting messaging capability that would enable more than one handset to be contacted with a single message.

We disagree with appellants' argument since it presumes a bodily incorporation of the Connolly PCS system into the cellular telephone system portion of Krebs. 35 U.S.C. § 103 does not require bodily incorporation of an element of one reference into another reference. Only a clear suggestion for modifying a reference is required. Further, the instant rejection is not based on modifying Krebs by Connolly but, rather, it is based on modifying the primary reference to Connolly by teachings of the secondary reference to Krebs. That is, Connolly was cited as a reference disclosing the subject matter of independent claims 1 and 14 but for the paging signal specifying no single handset. Connolly does specify a single handset to which the paging signal is directed. However, the examiner reasons that it would have been obvious to modify Connolly in order to provide a paging signal directed to no single handset because an artisan viewing the

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teachings of Krebs would have been led to provide for the advantages taught by Krebs in the system of Connolly. That is, while Connolly specifies a single handset to which the paging signal is directed, Krebs indicates that “dispatch communications allow for communications amongst a group of users, without a need to individually identify each group member before initiating communication.” Thus, it would have suggested to the skilled artisan that, sometimes, communication is desired with a group of users rather than a single user. Accordingly, it would have been obvious to modify Connolly to provide for communication with a group of users without a need for individually identifying each group member. While we are cognizant that the details of how appellants establish communication with a group of users differ from that disclosed by Krebs, independent claims 1 and 14 are broad enough to cover *any* transmission of a page request signal of a type that specifies no single handset and this much is suggested by Krebs.

Thus, we will sustain the rejection of independent claims 1 and 14 under 35 U.S.C. § 103 because the examiner appears to have set forth a prima facie case of obviousness that has not been overcome by any convincing argument of appellants.

With regard to claim 2, the examiner is, again, reasonable, in pointing out (answer-page 6) the corresponding elements of Connolly, i.e., the intelligent base station of

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Connolly is the claimed “base station” and that this is responsive to a first handset requesting a call to be set up (identifying the “Receive Response from Handset” portion of Connolly). The examiner also identifies that the incoming call is unanswered while the intelligent base station initializes the “Alerting Connect Call Cipher Messages” routine in order to route a call to the handset in Connolly. Yet, appellants’ only response [principal brief-page 10] to the examiner’s position with regard to instant claim 2 is to reiterate the language of the claim and to say merely that their review of the cited portion of Connolly “appears to recite a technique for routing a call to a handset.” However, appellants present no argument to dispute the examiner’s position that this routing of a call is equivalent to that set forth in instant claim 2. We note that appellants add nothing further in the reply brief with regard to claim 2.

Accordingly, we will also sustain the rejection of claim 2 under 35 U.S.C. § 103.

With regard to claims 3, 4 and 6, appellants’ “argument,” set forth at page 11 of the principal brief, is merely a statement that these claims include the limitations of their parent claims and so should be allowable. In other words, claims 3, 4 and 6 will fall with claims 1 and 2 and so we also sustain the rejection of claims 3, 4 and 6 under 35 U.S.C. § 103.

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With regard to claims 7 and 8, these claims set forth specifics of the type of digits in the page request signal. In claim 7, the first and second type digits of the page request signal are both hexadecimal F while in claim 8, a seventh least significant TPUI bit of the page request signal is 1. The examiner's position is that while the applied references do not disclose such specifics, since appellants have not disclosed that a hexadecimal F or a 1 in this context is for any particular purpose, it appears that the invention would perform equally well with any number of other well known coding schemes, i.e., these limitations are merely design choices.

Appellants argue, however, that these digit and bit formats are not merely design choice "but are selected to enable multiple handsets to simultaneously generate alerting indications for an incoming call within the constraints of a particular signalling format" [principal brief-page 11, citing Table 1 and pages 9-11 of the instant specification].

We will not sustain the rejection of claims 7 and 8 under 35 U.S.C. § 103 since appellants have shown a specific purpose for the particular digit and bit formats claimed and the examiner has offered no rebuttal. Thus, since a particular purpose for these specifically claimed digits and bits has been shown, and the examiner has not shown the equivalence of other "well known coding schemes" with the claimed limitations, a rejection

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based on “design choice” cannot stand. The examiner agrees that neither of the applied references discloses these limitations.

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Accordingly, we will not sustain the rejection of claims 7 and 8 under 35 U.S.C. § 103.

With regard to claims 11-13, specifying the particular type of digital cordless radio telephone system (claim 11-DECT; claim 12-WCPE and claim 13-PHS), appellants admit that Connolly discloses a DECT radio telephone system so it is unclear how the limitations of claim 11 are being argued by appellants. With regard to claims 12 and 13, appellants' argument is only that Connolly does not *expressly* mention a WCPE (Wireless Customer Premises Equipment) or a PHS (Personal Handyphone System). However, the rejection is based on 35 U.S.C. § 103 and appellants' "argument" that the reference does not *expressly* mention these types of systems fails to indicate why the use of the invention in these different types of radio telephone systems would not have been "obvious" in view of Connolly's teaching of a DECT system and in view of the artisan's familiarity with WCPE and PHS systems.

Accordingly, in view of appellants' unconvincing argument, we will sustain the rejection of claims 11-13 under 35 U.S.C. § 103.

We have reviewed appellants' arguments with regard to independent claim 20 but

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since they appear to be no different than the arguments presented with regard to independent claim 1, we will sustain the rejection of claim 20 under 35 U.S.C. § 103 for the same reasons we sustained the rejection of claim 1 under 35 U.S.C. § 103.

Thus, with regard to the rejection under 35 U.S.C. § 103 based on Connolly and Krebs only, we have sustained the rejection of claims 1-4, 6, 11-14 and 20 but we have not sustained the rejection of claims 7 and 8.

We now turn to the rejection of claims 5, 9, 10, 15-19 and 21 under 35 U.S.C. § 103 based on Connolly, Krebs and Barnes.

With regard to claim 5, the examiner notes that Barnes suggests sending a rejection signal and sending data regarding system access priority so the second handset can determine its priority with respect to that dispatch operation, citing column 24, lines 44-65 of Barnes. Thus, the examiner opines that in order to avoid delay by the second handset in waiting for an acceptance, it would have been obvious to transmit a signal rejecting the request from the second handset as taught by Barnes, in conjunction with the system taught by Connolly in view of Krebs [see page 7 of the answer]. Thus, while the examiner has set forth a reason for combining a suggestion of rejecting a signal, as

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disclosed by Barnes, with the combined teachings of Connolly and Krebs, appellants [principal brief-page 14] merely set forth the limitations of claim 5 and state that it “is not seen where this particular subject matter is disclosed or suggested by Barnes, in conjunction with the hybrid trunked/PCS system in accordance with the proposed combination of Connolly...and Krebs...” This argument is unpersuasive of patentability in view of the examiner’s identification of the passage in Barnes which allegedly teaches the claimed limitation. In other words, appellants have not fully confronted and answered the examiner’s rationale in setting forth the rejection of claim 5.

Later, in the reply brief, appellants stress that Barnes is not combinable with Connolly and Krebs and actually teaches away from the use of cellular telephone networks as a communications system in a wide area network. As evidence, appellants point to column 3, lines 48-52, of Barnes indicating that primary difficulties that are overcome in a wide area network comprised of cellular networks relate to the handoff of communications when a mobile transceiver moves from cell to cell during transmission [reply brief-page 5]. Appellants go on to note various advantages/disadvantages of establishing wide area networks for transmission trunked communications systems [reply brief-page 6] and conclude that the teachings of Barnes “could be extended only to the trunked portion of the combined references” [reply brief-page 6].

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We agree with the examiner that Barnes does not categorically reject the use of cellular telephone networks. While Barnes mentions the use of cellular telephone networks in the background section, at column 3, lines 45-48, and then mentions that there are difficulties with handoff of communications, opting for a trunked system requiring fewer handoffs, there is no indication that the portion of Barnes relied on by the examiner for the teaching of sending a rejection signal would not be applicable to the system of Connolly as modified by the teachings of Krebs.

Accordingly, in view of appellants' unpersuasive arguments, we will sustain the rejection of claim 5 under 35 U.S.C. § 103.

We will not sustain the rejection of claim 9 under 35 U.S.C. § 103. Claim 9 specifies that the four least significant TPUI bits of the page request signal specify a mode of user-alerting to be used by the handset.

The examiner takes the position that the "particular choice of such digits in the page request signal would have been obvious...since the applicant has not disclosed that the use of the four least significant TPUI bits in this context is of any particular purpose. It appears the invention would perform equally well with any number of other well know [sic,

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known] coding schemes” [Paper No. 4-page 6]. However, as argued by appellants [principal brief-page 14], the claimed bit format is no mere design choice but “is selected to enable multiple handsets to simultaneously generate alerting indications for an incoming call, within the constraints of a particular signalling format,” pointing to Table 1 and pages 9-11 of the instant specification.

Appellants’ argument appears reasonable to us and the examiner has not responded to the allegation that there is a specific purpose for the claimed bit format. Accordingly, we will not sustain the rejection of claim 9 under 35 U.S.C. § 103.

Claims 15 and 16 specify that the page request signal has an item of data specifying that the signal indicates that the alerting means is to be activated (claim 15) or that the alerting means is to be deactivated, for deactivating the alerting means (claim 16).

While the examiner merely alleges that the invention would perform equally well with any well known coding scheme, and this rejection might have been overcome by a showing by appellants that there is a particular advantage achieved by the specifying data of claims 15 and 16, appellants do not argue the examiner’s rejection of these claims except to set forth the limitations of the claims [principal brief-pages 14-15] and to state that these

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claims are patentable at least for the reason that they depend from claim 14 or that “it is not seen where the examiner’s proposed combination of prior art either expressly teaches or suggests this subject matter for a handset for a digital cordless radio telephone system.” These are not considered “arguments” as to the specific merits of the dependent claims but, rather, a wordy statement tantamount to appellants’ letting the dependent claims stand or fall with the independent claim from which they depend. Accordingly, in view of appellants’ lack of substantive argument regarding claims 15 and 16, the rejection of these claims under 35 U.S.C. § 103 is sustained as the claims will fall with independent claim 14.

Claim 10 recites that a data link control link between the base station and the at least one handset is unnecessary for the base station communication means to transmit the page request signal. The examiner contends [Paper No. 4-page 6] that Barnes discloses a base station in which a data link control link between the base station and the handset is unnecessary for the base station to transmit the signal analogous to an {LCE-PAGE-REQUEST}, citing Figure 5 and column 2, lines 24-31 of Barnes. Appellants argue [principal brief-page 14] that the cited portion of Barnes does not describe a mechanism analogous to an {LCE-PAGE-REQUEST} and, in fact, refers to the use of subaudio band signalling.

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We have reviewed the cited portion of Barnes. We agree with appellants that that section appears to refer to subaudio band signalling. Since it is unclear how this section has any relevance to the instant claimed subject matter, and the examiner has not responded to appellants' argument in the answer, we will not sustain the rejection of claim 10 under 35 U.S.C. § 103.

Claims 17-19 are similar to claims 11-13 in their recitation of different types of digital cordless radio telephone systems. For the reasons, supra, with regard to claims 11-13, we will sustain the rejection of claims 17-19 under 35 U.S.C. § 103.

Finally, we turn to the rejection of independent claim 21 under 35 U.S.C. § 103.

Appellants argue that it is not seen where the combination of references "either expressly discloses or suggests that a total number of user handsets that respond to a broadcast message that includes information for specifying a user handset alerting command, in a 'digital cordless radio telephone system,' is not constrained by a value of N, where N is a number of slots of the digital radio link" [principal brief-page 13].

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The examiner's response is to point to Barnes' recitation of " [o]perational flow is next directed to decision block 344 where it is determined whether the transceiver is being addressed as part of a 'normal' group of transceivers (i.e., a predetermined group of listeners such as a squad of police cars, fleet of taxis, etc.)". The examiner does not identify the particular portion of Barnes on which he relies but, apparently, this quotation is taken from column 25, lines 8-13 of Barnes. The examiner then concludes, "[p]resumably, this group of transceivers is not constrained by N" [answer-page 8].

We will not sustain the rejection of independent claim 21 under 35 U.S.C. § 103 because the examiner has not convincingly shown that any one of the applied references teaches or suggests that the total number of handsets responding to a broadcast message is not constrained by a value of N, where N is a number of slots of the digital radio link. To indicate that Barnes "presumably" shows a group of transceivers not constrained by N is too speculative to support a finding of obviousness under 35 U.S.C. § 103.

CONCLUSION

We have sustained the rejection of claims 1-6 and 11-20 under 35 U.S.C. § 103 but we have not sustained the rejection of claims 7-10 and 21 under 35 U.S.C.

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§ 103.

Accordingly, the examiner's decision is affirmed-in-part.

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)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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