

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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAYMOND CHIN, WEIJIA WANG and ARLIN TORBETT

Appeal No. 2002-1043
Application 08/784,860

ON BRIEF

Before KRASS, FLEMING, and RUGGIERO, **Administrative Patent Judges**.

FLEMING, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 11, all the claims pending in the instant application.

Invention

The invention relates to wireless communication. In particular, the invention relates to wireless communication using low-power mobile terminals. See page 1 of Appellants'

specification. Power conservation in mobile terminals is important to achieve a reasonable service battery life. See pages 1 and 2 of Appellants' specification. Appellants' invention is to provide two data rates for receiving messages at the mobile terminals. Appellants have discovered that by using a first data rate being higher than the second data rate for receiving messages at the mobile terminal, the capacity and network can be increased without requiring a short range, or higher power transmission capability in the mobile terminal. See page 3 of Appellants' specification.

Figure 2 shows a wireless communication network 200. In Figure 2, wireless communication network 200 includes a number of mobile terminals 201a through 201f, and a number of base stations, 202a through 202i. The data rate for the uplink messages which is transmitted from the mobile terminal to a base station remains at a lower data rate, e.g. 2400 baud, while the downlink messages sent to the mobile terminal by transmitter 203 or base stations 201a through 201i are sent at a much higher rate, e.g. 9600 baud. An initial control message from a base station will be sent to a mobile terminal at a rate less than 9600. This initial control message may specify to the mobile terminal the higher data rate for reception. See page 5 of

Appellants' specification.

Independent claim 1 is representative of Appellants' claimed invention and is reproduced as follows:

1. A wireless communication network supporting a plurality of mobile terminals each capable of receiving messages selectably at a first data rate and a second data rate, and transmitting messages at a third data rate, said first data rate being greater than both said second and third data rates, said network comprising:

a network control center; and

a plurality of base stations coupled to said network control center, each base station being capable of receiving messages from said mobile terminals at said third data rate and relaying said messages to said network control center wherein, during communication between said base station and one said mobile terminals, said base station sends said mobile terminal a control message at said second data rate, said control message specifying said first data rate for subsequent messages to said mobile terminal.

References

Sigler et al. (Sigler)	5,717,830	Feb. 10, 1998 (Filing date May 29, 1996)
Serizawa et al. (Serizawa)	5,754,961	May 19, 1998 (Filing date June 20, 1995)
Mahany et al. (Mahany)	5,483,676	Jan. 9, 1996

Rejection at Issue

Claims 1, 2, 5 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Serizawa in view of Mahany.

Claims 3, 4 and 7 through 11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Serizawa, Mahany and Sigler.

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Throughout our opinion, we make reference to the briefs¹ and answer.

OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of Appellants and the Examiner, for the reason stated *infra*, we reverse the Examiner's rejection of claims 1 through 11 under 35 U.S.C. § 103.

We will first address the Examiner's rejection of claims 1, 2, 5 and 6 under 35 U.S.C. § 103 as being unpatentable over Serizawa and Mahany. Appellants point out that Appellants' claim 1 requires

a plurality of mobile terminals each capable of receiving messages selectably at a first data rate and a second data rate, and transmitting messages at a third data rate, said first data rate being greater than both said second and third data rates . . . said base station sends said mobile terminal a control message at said second data rate, said control message specifying said first data rate for subsequent messages to said mobile terminal.

See page 6 of Appellants' brief. Appellants argue that the

¹ Appellants filed an appeal brief on March 19, 2001. Appellants filed a reply brief on July 6, 2001. The Examiner mailed out an Office communication on October 30, 2001, stating that the reply brief has been acknowledged. We note that the reply brief has been entered into the record.

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Examiner misunderstands Mahany's teaching. Appellants argue that Mahany teaches that the mobile units have the capability of transmitting at a higher data rate, but fails to teach that the mobile units are able to receive at two different data rates. See page 4 of Appellants' brief and pages 2 and 3 of the brief. Appellants argue that Mahany cannot properly be combined with Serizawa. Appellants point out that Mahany's teachings relate to providing a higher rate of transmission capability in the mobile terminal. Appellants' invention as claimed requires providing a control message at a second data rate, whereas the control message specifies the first data rate for subsequent messages to be received at the mobile terminal. Appellants argue that nothing in Mahany that suggests such a control message and certainly there is nothing in Serizawa or Mahany to suggest modifying Serizawa to be provided with a control message as claimed. See pages 3 and 4 of the reply brief.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in

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the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. **Oetiker**, 977 F.2d at 1445, 24 USPQ at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." **In re Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

When determining obviousness, "[t]he factual inquiry whether to combine references must be thorough and searching." **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002), **citing McGinley v. Franklin Sports, Inc.**, 262 F.3d 1339, 1351-52,

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60 USPQ2d 1001, 1008 (Fed. Cir. 2001). "It must be based on objective evidence of record." **Id.** "Broad conclusory statements, regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617. "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 1000, 50 USPQ2d at 1617, **citing McElmurry v. Ark. Power & Light Co.** 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

The Federal Circuit states that, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." **In re Fritch**, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), **citing In re Gordon**, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In addition, our reviewing court stated in **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002), that when make an obviousness rejection based on combination, "there must be some motivation, suggestion of

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teaching of the desirability of making the specific combination that was made by Applicant" (quoting **In re Dance**, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998)).

We note that there is no dispute that Serizawa fails to teach Appellants' claimed control message. See page 3 of the Examiner's answer. However, the Examiner does assert that Mahany teaches receiving at a higher data rate. See page 7 and 8 of the Examiner's answer.

Upon our review of Mahany, we find that Mahany teaches that a base station maintains RF communication with mobile units using a polling protocol which may communicate at a higher or lower data rates. The base station transmits a general polling message at a lower data rate which includes a test pattern which allows the mobile units to evaluate whether communication at a higher data rate is possible. Based upon the determination, the mobile units can select the appropriate rate to transmit data messages. See Abstract of Mahany. Also see Mahaney, column 2, lines 35 through 57. Mahany also discloses a preferred example in which existing systems utilize hand-held RF terminals of fixed data rate. Also the system might include other RF terminals that have been upgraded to be capable of transmitting at a higher data rate. See column 2, lines 62 through 67 of Mahany. The base

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station then may use a test pattern in a polling process such that the upgraded RF terminals can determine the feasibility of using the higher data rate. The RF terminals of fixed data rate will respond as usual. See column 3, lines 1 through 14 of Mahany.

Figures 7a and 7b illustrate an implementation of the embodiment of Figure 6 where the receiver of each mobile unit may transmit at a standard rate or at a higher rate for increase system throughput. See column 3, lines 60 through 67 of Mahany. The exemplary operation of the system according to Figures 6, 7a and 7b are detailed in columns 9 and 10 of Mahany. Mahany teaches that receiver 82a would not need to be switchable but could be fixed to receive a standard data rate, e.g. 4800 baud. We note that receiver 82a is in the mobile terminal unit 80 shown in Figure 6. See column 9, lines 65 through 67. Mahany further teaches that mobile unit 80 would receive a poll during time interval 131 and be ready to transmit messages at a higher rate e.g. 9600 baud. See column 10, lines 1 through 3. Thus, we find that Mahany does not teach a mobile unit which is able to receive at a higher rate. We find that Mahany teaches that mobile unit 80 is able to transmit at two different data rates and only receive at one data rate. Thus, the Mahany control message is to

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specify either using a first data rate or a second data rate for transmission but not to specify a first data rate and a second data rate for reception. Therefore, we fail to find any suggestion or teaching of modifying Serizawa to provide a control message specifying said second data rate for receiving messages at the mobile terminal as required by Appellants' claims. Therefore, we will not sustain the Examiner's rejection of claims 1, 2, 5 and 6 under 35 U.S.C. § 103 as being unpatentable over Serizawa and Mahany.

Claims 3, 4 and 7 through 11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Serizawa, Mahany and Sigler. We note that the Examiner has relied on the above combination of Serizawa and Mahany to meet the above claimed limitations for this rejection as well. Therefore, we will not sustain this rejection for the same reasons as stated above.

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In view of the foregoing, we have not sustained the
Examiner's rejection of claims 1 through 11 under 35 U.S.C.
§ 103.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
MICHAEL R. FLEMING)	
Administrative Patent Judge)	APPEALS AND
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