

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. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARK P. MIELKE, STEVEN D. TUCKER,
and ARTHUR R. HENNESSEY

Appeal No. 2002-2295
Application 08/988,457

HEARD: April 3, 2003

Before BARRETT, FLEMING, and SAADAT, **Administrative Patent Judges**.

FLEMING, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 3, 5, 7, 8, 11 through 14, 16, 17 and 20. Claims 4, 6, 9, 10, 15, 18 and 19 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Claims 21 through 32 have been canceled.

The invention relates to methods and systems for simultaneously updating a plurality of wireless units. In particular, the invention relates to wireless units contained in aircraft having complex application software. Periodically, the software of these wireless units must be updated to reflect more advanced versions of software. See page 1 of Appellants' specification. The invention relates to solving the problem for updating a large number of wireless units in aircraft in an efficient matter. See page 2 of Appellants' specification.

The wireless communication systems and methods consistent with the present invention include a central station, a mobile unit and a plurality of radio base stations. The central station receives from the mobile unit registration information identifying the radio base station currently in communication with the wireless unit. This registration information is then stored in a registration database located at the central station. Files are then transferred from the central station to the mobile unit using the radio base station identified by the registration information stored in the registration database. See page 2 of Appellants' specification.

Figure 1 is a block diagram of the wireless communication system 100. As shown in figure 1, system 100 includes a ground switching station 200, a radio base station 400, and an aircraft unit 500. See page 4 of Appellants' specification. Figure 2 is a flow diagram showing the method for registering aircraft units 500 with ground switching station 200. As shown in figure 2, each aircraft unit 500 transmits registration information to ground switching station 200 (step S210). The registration information preferably includes an identification number identifying the particular aircraft unit 500 that is registered, the radio base station 400 currently in communication with the aircraft unit 500, and the radio base station 400 previously in communication with the aircraft unit 500. See page 8 of Appellants' specification.

Figure 3 is a flow diagram showing a method of transmitting the updates for application software to be loaded on aircraft unit 500. As shown in figure 3, ground switching station 200 initiates a transfer process by transmitting a call request over a control channel to aircraft 500 (step S310). Radios 510 located on aircraft unit 500 continuously monitor for transmission of a call request (step S320). When a call request is detected, radios 510 select one of the plurality of

communication channels for transmission of the broadcast (step S330). See pages 9 and 10 of Appellants' specification.

Aircraft unit 500 then transmits an acknowledgment signal back to the ground switching station 200 (step S340). If the acknowledgment signal indicates aircraft unit 500 can receive the file, ground switching station 200 transmits the file over the selected channel (step S350). When ground switching station 200 has finished the file transfer, telecommunications unit 520 then routes the data to its intended destination on aircraft unit 500 (step S360). Figure 4 is a flow diagram showing a batch process used to update the application software on-board aircraft units 500. See page 10 of Appellants' specification.

Independent claim 1 present in the application is reproduced as follows:

1. A method for transferring data in a communication system, the communication system comprising a central station, a plurality of mobile units, and a plurality of radio base stations, wherein the central station communicates with each of the plurality of mobile units, the method comprising the steps of:

receiving from each mobile unit registration information identifying a radio base station currently in communication with the mobile unit;

storing the registration information in a registration database located at the central station, such that the registration database stores information identifying the

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particular radio base station currently communicating with each of the plurality of mobile units;

receiving a request to transfer data to a selected group of the plurality of mobile units; and

transferring data from the central station to the selected group of mobile units using the radio base stations identified by the registration information stored in the registration database for each mobile unit in the selected group, wherein the data transferred to the selected group of mobile units includes application software invoked by at least one of the mobile units.

References

The references relied on by the Examiner are as follows:

Grube et al. (Grube)	5,553,314	Sept. 3, 1996
LaPorta et al. (LaPorta)	6,014,429	Jan. 11, 2000
	(filing date Aug. 12, 1996)	

Rejection at Issue

Claims 1 through 3, 5, 7, 8, 11 through 14, 16, 17 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over LaPorta in view of Grube.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the briefs¹ and the answer for the respective details thereof.

¹Appellants filed an appeal brief on January 30, 2002. Appellants filed a reply brief on June 24, 2002. The Examiner mailed an office communication on August 2, 2002, stating that the reply brief has been considered and entered.

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Opinion

With full consideration being given to the subject matter on appeal, the Examiner's rejection and the arguments of Appellants and Examiner, for the reasons stated *infra*, we reverse the Examiner's rejection of claims 1 through 3, 5, 7, 8, 11 through 14, 16, 17 and 20 under 35 U.S.C. § 103.

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 USPQ 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 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. *Oeticker*, 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 arguments." *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).

Appellants argue that neither LaPorta nor Grube teaches or suggests a central station that transfers application software data invoked by a mobile unit by using radio base stations identified from the registration information received from the mobile units and stored in a registered database, as recited in independent claims 1 and 11. See pages 5 through 7 of the brief.

We note that Appellants' claim 1 recites

storing the registration information in a registration database located at the central station, such that the registration database stores information identifying the particular radio base station currently communicating with each of the plurality of mobile units;

receiving a request to transfer data to a selected group of the plurality of mobile units; and

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transferring data from the central station to the selected group of mobile units using the radio base stations identified by the registration information stored in the registration database for each mobile unit in the selected group, wherein the data transferred to the selected group of mobile units includes application software invoked by at least one of the mobile units.

We also note that the only other remaining independent claim 11 recites:

a central station for communicating with each mobile unit through one of the radio base stations, the central station further including:

a registration database including registration information identifying the radio base station currently in communication with each mobile unit; and

a switch control processor for transferring data to a selected group of the plurality of mobile units using the radio base stations identified by the registration information stored in the registration database for each mobile unit in the selected group, wherein the data transferred to the selected group of mobile units includes application software invoked by at least one of the mobile units.

Therefore, all the claims before us set forth the limitations requiring a central station that transfers application software data invoked by a mobile unit using the radio base stations identified from registration information received from the mobile units and stored in a registration database.

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When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or individual to combine the relevant teachings of the references.'" **Lee**, 277 F.3d at 1343, 61 USPQ2d at 1434, **citing In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "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 999, 50 USPQ2d at 1617, **citing McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

The Examiner has conceded that the LaPorta messaging system fails to disclose or suggest a central station that transfers application software invoked by a mobile unit using the radio base stations identified from the registration information received from the mobile units and stored in a registration database. However, the Examiner relies on Grube for this teaching. See pages 3 and 4 of the Examiner's answer.

Upon our review of Grube, we find that Grube teaches a wireless communication system 100 having a plurality of communication units 102. See figure 1 and column 2, lines 35 through 41. The communication unit 102 communicates with configuration device 115 over a second wireless communication path 117. See figure 1 and column 2, lines 53 through 55. The second communication path 117 may be an RF communication path or an infrared communication path of a very low power level such that the range between the two devices is approximately 20 feet. See column 2, lines 55 through 62.

The configuration device 115 includes a storage element 116 that stores the identification codes for a particular communication unit and also the system access information for a particular communication unit. See column 3, lines 3 through 23. The communication device 115 should be manufactured in a way that it will make it readily carryable by the operator of the communication unit. See column 3, lines 29 through 41. Thus, the communication path 117 is entirely separate from the communication 103 that the remote unit uses to communicate with other remote units. Also, the configuration unit 115 is a portable device that is carried by the operator of the communication unit 102.

Grube fails to teach or suggest that the configuration device 115 is used in any way other than to simply provide data to a single remote unit and to be used only with that remote unit. Therefore, Grube only teaches using, with each remote unit, a personal configuration device 115 that stores all the application data for that remote unit. We find nothing in Grube to teach or suggest modifying the LaPorta central station. At most, Grube simply would lead those skilled in the art to modify the LaPorta system to include a replaceable configuration unit associated with each pager or remote unit. Therefore, this combination would not result in a central station that transfers application software data invoked by a mobile unit using the radio base stations identified from registration information received from the mobile units and stored in a registration database as recited in Appellants' claims.

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In view of the foregoing, we have not sustained the Examiner's rejection of claims 1 through 3, 5, 7, 8, 11 through 14, 16, 17 and 20 under 35 U.S.C. § 103.

REVERSED

LEE E. BARRETT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
MICHAEL R. FLEMING)	
Administrative Patent Judge)	APPEALS AND
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