

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAJARAM RAMESH

Appeal No. 2001-2017
Application No. 09/098,049

ON BRIEF

Before KRASS, BARRETT and FLEMING, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-3, 5-14 and 16-28.

The invention is directed to a mobile position computation apparatus within a region serviced by a radio communication network, best illustrated by reference to representative independent claim 1, reproduced as follows:

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1. A mobile position computation apparatus for use within a region serviced by a radio communication network comprising:

a first receiver for receiving a radio communication broadcast over the radio communication network on a broadcast control channel;

a second receiver for receiving positioning messages broadcast by a positioning satellite;

position computation circuit coupled to the second receiver;
and

means coupled to said first receiver for obtaining positioning data from the radio communication broadcast and providing the positioning data to the position computation circuit for use in acquisition of the positioning satellite.

The examiner relies on the following references:

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|---------------------------------|-------------|---------------|
| Schuchman et al. [Schuchman] | 5,365,450 | Nov. 15, 1994 |
| Wortham (PCT application) | WO 96/15636 | May 23, 1996 |

Claims 1-3, 5-14 and 16-28 stand rejected under 35 U.S.C. 103 as unpatentable over Schuchman in view of Wortham.

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

OPINION

With regard to independent claims 1 and 11, it is the

examiner's position that Schuchman discloses a first receiver at 21, a second receiver at 20, a position computation circuit inside the second receiver 20 and a means, 22, coupled to the first receiver, for obtaining data from the radio communication broadcast and providing the position data to the computation circuit for use in acquisition of the position satellite. The examiner maintains that while Schuchman fails to explicitly teach that the broadcast digital channel is a broadcast control channel, the use of a control channel for conveying data is "conventionally well known, which is taught by Wortham" [answer-page 4]. Since Wortham teaches that control data can be transmitted via control channel from the base station to the mobile station, the examiner contends that it would have been obvious "to provide radio communication on a broadcast control channel of Wortham into the system of Schuchman in order to reserve traffic channels for other mobile stations."

For his part, appellant argues that the art recognizes distinctions between "broadcast" and "traffic," or "data link," channels and that Schuchman, itself, refers separately to "broadcast or cellular data link" in Figure 2. Moreover, appellant argues, Schuchman does not teach the use of a "broadcast" channel to provide "positioning data." Rather,

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according to appellant, Schuchman's "broadcast digital channels" at most, support call set-up and do not, themselves, provide the assistance information. That is, in appellant's view, Schuchman "simply does not teach or suggest broadcasting the positioning data on a broadcast channel but, instead, suggests the use of a traffic channel established responsive to a request for the information" [principal brief-page 7].

Further, appellant contends that Wortham does not provide for the deficiency of Schuchman. While appellant admits that it is known to transmit control data via a control channel, which is all that Wortham is cited for by the examiner, appellant argues that Schuchman not only fails to teach the control channel, but also a broadcast channel and that it is not appropriate to separate the content of the broadcast information, i.e., "positioning data," as recited in the claims, from the form of broadcast which are both included in a single step recitation.

Appellant points out that the combination of references is not appropriate because Schuchman is not directed to differential GPS while Wortham is directed to differential GPS. Accordingly, in appellant's view, Schuchman provides for assistance information for use in acquiring satellites while correction information is provided in Wortham to refine the accuracy of

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position measurements by a mobile device.

Initially, we note that since the examiner employs Wortham exclusively for the teaching of using a control channel for conveying data, and appellant now admits that it is known to transmit control data via a control channel, the use of Wortham in the rejection is superfluous and we should concentrate on the issue of whether Schuchman suggests using a broadcast channel to provide positioning data or whether it would have been obvious to provide a broadcast channel in Schuchman to do so.

From our review of Schuchman, it does appear that the reference discloses a "first receiver" in cellular radiotelephone unit 21 and a "second receiver" in GPS receiver 20 for receiving positioning information from a satellite. In accordance with column 7, line 24, of Schuchman, GPS receiver 20 uses data obtained from controller 22 to, inter alia, "calculate the position of the receiver" and acquire the positioning satellite.

However, it is not clear, from Schuchman's disclosure, whether Schuchman employs a broadcast channel to provide positioning data to the second receiver 20 by a positioning satellite or whether the first receiver 21 receives a broadcast on a broadcast control channel. Schuchman's abstract states that

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a GPS system "is provided with a separate source satellite position data broadcast digital channels and one or more dial-up service separate communication channels...for assisting the mobile radio station to access position information from the satellites." However, it appears that the language "assisting the mobile radio station to access position information from the satellites" modifies "one or more dial-up service separate communication channels" in which case position information is not received by using the broadcast digital channels. Even if the language "assisting...to access position information from the satellites" is modifying "satellite position data broadcast digital channels **and** one or more dial-up service separate communication channels" [emphasis added], this would still indicate that the position information is not received by using the broadcast digital channels alone. Since the language of Schuchman, itself, is unclear as to whether Schuchman is providing for position information received on a broadcast channel, any rejection under 35 U.S.C. 103, using Schuchman's teaching as a basis, would be based on speculation at best. This is not a proper basis on which to rest a rejection under 35 U.S.C. 103.

Moreover, a broadcast "digital" channel is not, necessarily,

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a broadcast "control" channel, as recognized by the examiner in applying Wortham. If Schuchman does not disclose or suggest the use of a broadcast "control" channel, what would have led the artisan to provide for one? Merely because such "control" channels were known and that it was known to provide data on a control channel does not, per se, make it obvious, within the meaning of 35 U.S.C. 103, to provide for a broadcast control channel in the system of Schuchman. The examiner indicates that this would have been done "in order to reserve traffic channels for other mobile stations" but there is no indication, within the applied references, that there would have been any need for, or advantage in, reserving traffic channels for other mobile stations. Accordingly, the examiner has provided insufficient motivation for modifying Schuchman in order to provide for the deficiency admitted by the examiner.

Accordingly, we will not sustain the rejection of independent claims 1 and 11, and the claims dependent thereon, under 35 U.S.C. 103.

Since independent claims 23, 25 and 27 also contain the limitation of a "broadcast control channel," we will not sustain the rejection of these claims, or of the claims dependent thereon, under 35 U.S.C. 103, for the reasons supra.

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The examiner's decision rejecting claims 1-3, 5-14 and 16-28
under 35 U.S.C. 103 is reversed.

REVERSED

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