Datasheet for the decision
of 7 March 2008

Case Number: T 0021/06 - 3.5.03
Application Number: 01306718.6
Publication Number: 1189462
IPC: H04Q 7/22
Language of the proceedings: EN

Title of invention:
Method and apparatus for a wireless telecommunication system that provides location-based messages

Applicant:
Lucent Technologies Inc.

Opponent:
-

Headword:
Wireless telecommunication system/LUCENT

Relevant legal provisions:
EPC Art. 56, 84, 113(1), 123(2)
EPC R. 115(2)

Relevant legal provisions (EPC 1973):
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Keyword:
"Oral proceedings held in absence of appellant"
"Inventive step - all requests (no)"

Decisions cited:
-

Catchword:
-
Case Number: T 0021/06 - 3.5.03

DECISION
of the Technical Board of Appeal 3.5.03
of 7 March 2008

Appellant: Lucent Technologies Inc.
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Decision under appeal: Decision of the examining division of the European Patent Office posted 31 May 2005 refusing European application No. 01306718.6 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: A. S. Clelland
Members: F. van der Voort
R. Menapace
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 01306718.6, publication number EP 1 189 462 A.

II. The following documents, referred to in the decision under appeal and/or in the European search report, are relevant to the present decision:

D1:  WO 97/41654 A; and

D3:  US 6 091 959 A.

III. In the notice of appeal the appellant requested that the decision be set aside and a patent be granted. With the statement of grounds of appeal the appellant filed a set of claims, intended to replace the claims on file, and submitted arguments in support.

IV. In a communication accompanying a summons to oral proceedings the board gave a preliminary opinion in which objections under Articles 84 and 123(2) EPC and Article 52(1) EPC in combination with Article 56 EPC were raised. The following document was cited in accordance with Article 114(1) EPC:

D4:  US 6 115 611 A.

V. In response to the board's communication, the appellant filed new claims of a main request and three auxiliary requests, intended to replace the previous set of claims on file. Arguments in support were also submitted. The appellant further informed the board that it would not
attend the oral proceedings and requested that the oral proceedings be cancelled and that the procedure be continued in writing.

VI. In a subsequent communication the board informed the appellant that the request that the oral proceedings be cancelled could not be granted and that the date fixed for the oral proceedings was maintained. Reasons were given.

VII. Oral proceedings were held on 7 March 2008 in the absence of the appellant. The board understood from the appellant's written submissions that the appellant requested that the decision be set aside and a patent be granted on the basis of the claims of the main request or, failing that, on the basis of the claims of any one of the auxiliary requests, all requests as filed in response to the summons to oral proceedings. After deliberation, the board's decision was announced at the end of the oral proceedings.

VIII. Claim 1 of the main request reads as follows:

"A location-based messaging method in a wireless communication network including:

   receiving information (S2) from a wireless mobile unit (410) associated with at least one category of information;

   determining (S4) that the wireless mobile unit (410) has entered a region having located therein a site associated with the at least one category of information, based upon the information received from the wireless mobile unit (410), the information received from the wireless mobile unit (410) including at least one of a
global positioning system (GPS) signal and assisted GPS signal; and

outputting information (S6) relating to the at least one category, in response to determining that the wireless mobile unit (410) has entered the region having located therein the site associated with the at least one category."

Claim 1 of the first auxiliary request reads as follows:

"A location-based messaging method in a wireless communication network including:

receiving information (S2) from a wireless mobile unit (410) associated with at least one category of information;

determining a location of the wireless mobile unit (410) and (S4) [sic] that the wireless mobile unit (410) has entered a region having located therein a site associated with the at least one category of information based upon the information received from the wireless mobile unit (410); and

outputting information (S6) relating to the at least one category, in response to determining that the wireless mobile unit (410) has entered the region having located therein the site associated with the at least one category and determining that the wireless mobile unit (410) is within an event triggering distance from the site."

Claim 1 of the second auxiliary request reads as follows:

"A location-based messaging method in a wireless communication network including:

receiving information (S2) from a wireless mobile
Claim 1 of the third auxiliary request reads as follows:

"A location-based messaging method in a wireless communication network including:

receiving information (S2) from a wireless mobile unit (410) associated with at least one category of information;

determining (S4) a location of a wireless mobile unit (410) and [sic] that the wireless mobile unit (410) has entered a region having located therein a site associated with the at least one category of information based upon the information received from the wireless mobile unit (410);

storing a digitized map of the region having located therein the site associated with the at least one category of information; and

outputting information (S6) relating to the at least one category, in response to determining that the wireless mobile unit (410) has entered the region having located therein the site associated with the at least one category and determining that the wireless mobile unit (410) is within an event triggering distance from the site."

Claim 1 of the third auxiliary request reads as follows:

"A location-based messaging method in a wireless communication network including:

receiving information (S2) from a wireless mobile unit (410) associated with at least one category of information;

determining (S4) a location of a wireless mobile unit (410) and [sic] that the wireless mobile unit (410) has entered a region having located therein a site associated with the at least one category of information based upon the information received from the wireless mobile unit (410);

storing a digitized map of the region having located therein the site associated with the at least one category of information; and

outputting information (S6) relating to the at least one category, in response to determining that the wireless mobile unit (410) has entered the region having located therein the site associated with the at least one category and determining that the wireless mobile unit (410) is within an event triggering distance from the site."
one category of information;

comparing the determined location of the wireless mobile unit (410) with the stored digitized map;

determining \textit{[sic]} the wireless mobile unit (410) is within an event triggering distance from the site based on the comparison; and

outputting information (S6) relating to the at least one category, in response to determining that the wireless mobile unit (410) has entered the region having located therein the site associated with the at least one category and determining that the wireless mobile unit (410) is within the event triggering distance from the site."

\textbf{Reasons for the Decision}

1. \textit{Procedural matters}

1.1 The board considered it to be expedient to hold oral proceedings for reasons of procedural economy (Article 116(1) EPC). Having verified that the appellant was duly summoned the board decided to continue the oral proceedings in the absence of the appellant (Rule 115(2) EPC and Article 15(3) RPBA).

1.2 In the communication accompanying the summons, objections under Articles 84 and 123(2) EPC and Article 52(1) EPC in combination with Article 56 EPC were raised in respect of claim 1 as pending at the time and the appellant was informed that at the oral proceedings these objections would be discussed. Consequently, the appellant could reasonably have expected the board to consider at the oral proceedings
these objections not only in respect of claim 1 pending at the time but also in respect of the amended versions of claim 1, which were filed by the appellant in response to the summons to oral proceedings. In deciding not to attend the oral proceedings the appellant chose not to make use of the opportunity to comment at the oral proceedings on any of these objections but, instead, chose to rely on the arguments as set out in the written submissions, which the board duly considered below.

1.3 In view of the above and for the reasons set out below, the board was in a position to give at the oral proceedings a decision which complied with the requirements of Article 113(1) EPC.

2. Article 84 EPC

In claim 1 of each request the feature "receiving information (S2) from a wireless mobile unit (410) associated with at least one category of information" is ambiguous in that it is not clear whether the at least one category of information is associated with the information which is received or with the wireless mobile unit. For an assessment of inventive step, the board interprets the above feature as meaning that the at least one category of information is associated with the wireless mobile unit, which is also in agreement with the description, see col. 4, lines 3 to 5, col. 9, lines 11 to 17 and 26 to 30, and col. 11, lines 26 to 29, of the application as published.
3. Main request

3.1 Claim 1 of the main request does not comply with the requirements of Article 123(2) EPC, since, as already pointed out in the communication in relation to claim 1 of the previous request, the application as originally filed does not provide a basis for the feature that the information received from the wireless mobile unit includes at least one of a global positioning system signal and an assisted GPS signal. The application as originally filed merely discloses that this information may be either a GPS or an assisted GPS signal, see paragraph [0028] of the application as published ("a GPS or assisted GPS signal") but does not disclose the use of both, which is implied by "at least". Hence, the appellant's argument that claim 1 is consistent with paragraph [0028] cannot be followed.

3.2 If, for the sake of argument, the above feature were interpreted as meaning that the information received includes either a GPS or an assisted GPS signal but not both, the subject-matter of claim 1 would lack an inventive step for the following reasons:

3.3 D1 discloses, using the language of claim 1 of the main request, a location-based messaging method in a wireless communication network (see the abstract), the method including the steps of:
in a telecommunications network 30 (Fig. 1) including a mobile terminal locating means MPC 38 (page 7, lines 27 to 30, Fig. 1), receiving a signal sent from a wireless mobile unit, i.e. mobile terminal 32 (page 8, lines 5 to 12);
determining, based upon the received signal, that the
mobile terminal has entered a designated region, e.g. is on a traffic route which is stored in a customer profile (page 7, lines 27 to 31, and page 8, lines 1 to 9 and lines 21 to 26); and outputting information relating to the designated region to the mobile terminal 32 in response to determining that the mobile terminal has entered the designated region (page 8, lines 15 to 18, page 9, lines 17 to 21, and claim 4).

Since the mobile terminal locating means MPC 38 is capable of determining the location of the mobile terminal 32 on the basis of the received signal, it is implicit that the received signal includes at least information which identifies the mobile terminal 32. Further, the customer profile, which is stored in a customer database 42 (Fig. 2), associates the mobile terminal 32 with at least one category of information (page 3, lines 2 to 12).

3.4 The subject-matter of claim 1 of the main request differs from the method of D1 in that according to claim 1 the information received from the wireless mobile unit includes a GPS signal or an assisted GPS signal.

3.5 The board notes that in D1 a number of known techniques for locating a mobile terminal are described, see page 8, lines 1 to 12. However, D1 does not provide details of how, on the basis of the received information signal, the mobile terminal locating means 38 determines the location of the mobile terminal and, more specifically, determines that the mobile terminal is on the above-mentioned stored traffic route. In the board's view, it is evident that neither a determination in which cell the mobile terminal is located nor a determination of the distance between the
mobile terminal and the base station of this cell (see the above-cited passage of D1) is sufficient in order to be able to determine that the mobile terminal is on the stored traffic route.

3.6 In the board's view, the use of a GPS signal for determining the position of a wireless mobile unit on a road network was however well-known before the priority date, see D3 (col. 4, lines 44 to 49 ("In one embodiment, the portable subscriber unit 122 also includes a location receiver 234, such as a Global Positioning System (GPS) receiver, coupled to the processing system 206 for helping determine the location information through well-known techniques.") and col. 6, lines 57 to 59 ("It is well-known that some location determining technologies, e.g., GPS, require time to achieve high resolution.") and D4 (col. 1, lines 15 to 26 ("A car navigation system has been well known as a mobile communicating system providing map information to a mobile object deduced from position information of the mobile object. The car navigation system utilizes, in general, GPS (Global Positioning System) as well known, in which current position information (coordinates; a latitude and a longitude) of its own (a motor vehicle, in this case) is detected...") and col. 36, lines 54 to 56 ("The above position information detecting unit 41 of the mobile terminal 4 may detect position information of its own utilizing a satellite such as GPS.").

The board also notes that in the present application it is acknowledged that GPS systems were, at the claimed priority date, known as being cheap to implement and expected to become prevalent in wireless mobile units (see paragraph [0007] of the application as published and
3.7 Hence, taking into account the common general knowledge of the person skilled in the art, it would have been obvious to the person skilled in the art at the priority date to implement the method disclosed in D1 by making use of GPS information as the information to be received by the mobile terminal locating means 38 of D1 in order to determine the position of the wireless mobile unit and, in particular, that it is on the stored traffic route. The skilled person would thereby have arrived at a location-based messaging method including all the features of claim 1.

3.8 The appellant argued in this respect that neither D3 nor D4 described the specific method recited in claim 1 or included an indication that a person skilled in the art would modify the teachings of D1 based on D3 and D4 in order to arrive at the specific features of claim 1.

However, whether or not D3 or D4 describes the claimed method is only relevant to the question of novelty, which is not the issue here. Further, D3 and D4 were cited because of the above-quoted passages which imply that the use of GPS signals for determining the position of a wireless mobile unit was well-known before the priority date, i.e. was part of the common general knowledge in the art. The board judges that, when faced with the problem of implementing the method of D1, it would have been obvious to the skilled person to combine the teaching of D1 with this common general knowledge in the art. The arguments are therefore not convincing.
3.9 The board thus concludes that the subject-matter of claim 1 does not involve an inventive step having regard to the disclosure of D1 and taking into account the common general knowledge of the person skilled in the art (Articles 52(1) and 56 EPC). The main request is therefore not allowable.

4. **First auxiliary request**

4.1 Claim 1 of the first auxiliary request differs from claim 1 of the main request in that it does not mention GPS or assisted GPS and includes the feature of outputting information relating to the at least one category in response to:

1) determining that the wireless mobile unit (410) has entered the region having located therein the site associated with the at least one category; and

2) determining that the wireless mobile unit (410) is within an event triggering distance from the site.

The claim thereby covers a location-based messaging method which includes the above steps 1) and 2) as separate steps.

4.2 The appellant argued that "support for the claims amendments is found at least in paragraph [0015], [0017] and [0022] of the published application.". However, paragraph [0022] merely relates to step 1), whilst paragraphs [0015] and [0017] each relate to a location-based messaging method which includes either step 1) or step 2), but not both steps ("These maps are used by controller 520 for comparison purposes with a current location of wireless mobile unit 410 to determine
whether or not the wireless mobile unit 410 is within a specific geographic region, or within a specific site; is within a region neighboring (proximate to) a particular geographic region or site; or is within a certain event triggering distance of a site." and "Setting a trigger to activate the system when wireless mobile units 410 are within/neighboring/or proximate to a designated region is a presettable option and can be modified in any way desired as would be understood by one of ordinary skill. Thus, thresholds for triggering retrieval and outputting of information can be set for proximate (10 mile, 5 mile, 1 mile, etc.) distances from a site (mall, sports stadium, etc.), or for activation within a site." (underlining by the board). A similar wording can be found in paragraph [0029], last sentence.

Hence, these paragraphs do not provide a basis for the above-mentioned feature. Nor is a basis for this feature apparent from other parts of the application documents as originally filed.

4.3 The board therefore concludes that claim 1 of the first auxiliary request does not comply with Article 123(2) EPC.

4.4 If, for the sake of argument, the above-mentioned feature were interpreted as meaning that the second step is part of the first step, the subject-matter of claim 1 would lack an inventive step (Articles 52(1) and 56 EPC) having regard to the disclosure of D1. Reference is made to the reasons, applied mutatis mutandis, as set out above in relation to claim 1 of the main request; it is additionally noted that D1 discloses that the described location-based messaging method of D1 may offer an
information service according to which, if the subscriber is located near particular tourist attractions or amusements, their location is transmitted to the subscriber's terminal (see page 9, lines 17 to 21), which in the board's view suggests that the system determines that the subscriber's mobile terminal is within an event triggering distance from the particular tourist attraction or amusement.

4.5 In view of the above, the board concludes that the first auxiliary request is not allowable.

5. Second auxiliary request

5.1 Claim 1 of the second auxiliary request combines the features of claim 1 of the main request and those of claim 1 of the first auxiliary request. Consequently, the reasoning set out at points 3 and 4 above applies, mutatis mutandis, to claim 1 of the second auxiliary request. In particular, claim 1 of this request does not comply with Article 123(2) EPC and its subject-matter lacks an inventive step, Articles 52(1) and 56 EPC.

5.2 The second auxiliary request is therefore not allowable.

6. Third auxiliary request

6.1 Claim 1 of the third auxiliary request differs from claim 1 of the first auxiliary request in including a separate step of determining that the wireless mobile unit is within an event triggering distance from the site and in including the additional steps of storing a digitized map of the region having located therein the site associated with the at least one category of
information and of comparing the determined location of
the wireless mobile unit with the stored digitized map,
the above-mentioned step of determining being based on
the comparison.

6.2 It follows that the reasoning as set out above at
points 4.1 to 4.3 above, concerning the non-compliance of
claim 1 of the first auxiliary request with the
requirements of Article 123(2) EPC, also applies to
claim 1 of the third auxiliary request.

6.3 Further, the board notes that the appellant did not submit
any arguments as to why the additional steps of storing a
digitized map and comparing the determined location of the
wireless mobile unit with the stored digitized map would
contribute to an inventive step. Nor does the board see
any reasons which would justify a conclusion that the
claimed subject-matter would involve an inventive step. On
the contrary, D1, see page 8, lines 26 to 30, discloses
that maps in the subscriber's vicinity may be downloaded
from a directory database to the subscriber terminal. It
would therefore have been obvious to a person skilled in
the art to use these maps in order to determine whether or
not the subscriber is near the particular tourist
attraction or amusement as referred to on page 9, lines 17
to 20. Claim 1 of this request therefore also lacks an
inventive step (Articles 52(1) and 56 EPC).

6.4 The board therefore concludes that the third auxiliary
request is not allowable.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  The Chairman:

D. Magliano  A. S. Clelland