Datasheet for the decision of 19 June 2012

Case Number: T 1344/09 - 3.4.01
Application Number: 02806207.3
Publication Number: 1470433
IPC: G01S 5/02
Language of the proceedings: EN

Title of invention:
Satellite positioning system enabled media measurement system and method

Applicant:
RDPA LLC

Headword:
-

Relevant legal provisions:
EPC Art. 56
RPBA Art. 13(1)(3)

Keyword:
"Inventive step (no, main request and first auxiliary request)"
"Admissibility of late-filed requests (no, second to fourth auxiliary requests)"

Decisions cited:
G 0010/93 (OJ 1995, 172); T 0641/00 (OJ 2003, 352); T 0154/04 (OJ 2008, 46), T 0756/06

Catchword:
-
Case Number: T 1344/09 - 3.4.01

Decision of the Technical Board of Appeal 3.4.01
of 19 June 2012

Appellant: RDPA LLC
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Decision under appeal: Decision of the Examining Division of the
refusing European patent application
No. 02806207.3 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: F. Neumann
Members: H. Wolfrum
M. J. Vogel
Summary of Facts and Submissions

I. European patent application 02 806 207.3 (publication No. WO-A-03 058269 / EP-A-1 470 433) was refused by a decision of the examining division dispatched on 28 January 2009, inter alia for the reason of lack of inventive step (Articles 52(1) and 56 EPC 1973) of the subject-matter of claims 1 to 63 filed on 20 June 2008.

II. The applicant lodged an appeal against the decision and paid the prescribed fee on 25 March 2009. On 8 June 2009 a statement setting out the grounds of appeal was filed. According to a main request, the appellant requested the grant of a patent on the basis of the claims on which the contested decision was based, i.e. on the set of claims 1 to 63 filed on 20 June 2008, or their referral back to the examining division. Alternatively, grant of a patent was requested on the basis of amended sets of claims according to a first and a second auxiliary request, or their respective referral back to the examining division. Furthermore, an auxiliary request for oral proceedings was made.

III. On 18 January 2012 the appellant was summoned to oral proceedings, originally scheduled to take place on 3 April 2012.

In a communication annexed to the summons, the Board gave a negative preliminary opinion inter alia on the issue of inventive step based on each of documents:

D1 : WO-A-00/45130; and
Document D2 originated from the search report in a parallel US patent and was introduced by the Board into the present proceedings.

The Board indicated in the communication that any further written submissions should be filed at least one month before the oral proceedings.

IV. In response to a respective request of the appellant made by letter of 25 January 2012, the oral proceedings were postponed to 19 June 2012.

V. On 7 May 2012 observations under Article 115 EPC by an anonymous third party were submitted.

The third party observations occasioned a request from the appellant dated 10 May 2012 for further postponement of the oral proceedings.

The Board's registry informed the appellant by telephone on 14 May 2012 that the Board did not intend to postpone the oral proceedings.

VI. By letter of 21 May 2012 the appellant responded to the Board's communication and filed three new sets of claims according to a third to fifth auxiliary request, respectively.

VII. At the start of oral proceedings, which were held on 19 June 2012, the appellant replaced all of its requests filed in writing by a new main request and four new auxiliary requests on the basis of which the decision under appeal should be set aside and a patent be granted. Moreover, as a fifth auxiliary request, the
appellant requested remittal to the examining division for further prosecution on the basis of its second to fourth auxiliary requests.

VIII. After announcement of the decision and closure of the oral proceedings the appellant stated "for the record" that he considered the decision not to admit the second to fourth auxiliary requests to represent an infringement of his right to be heard.

IX. Independent claims 1 and 15 of the appellant's main request read as follows:

"1. Apparatus for determining the effectiveness of media displays, comprising:
   (a) a plurality of monitoring devices (200) for tracking the paths of travel followed by a plurality of respondents, each of said respondents associated with a respective one of said plurality of monitoring devices, each of said plurality of monitoring devices comprising:
      (i) a satellite positioning system SPS engine (245) for tracking the movement of the related respondent along the path of travel followed by the respondent and generating satellite data that represents the path of travel followed by the respondent;
      (ii) a processing unit (210) for processing the path of travel satellite data; and
      (iii) a memory (250) for storing said path of travel satellite data;
   and
   (b) a server (300) for:
(i) collecting (350) the path of travel satellite data from each of the monitoring devices; and
(ii) analyzing (310) said collected path of travel satellite data to determine if said plurality of respondents has been exposed to one or more of a plurality of media displays by matching geo data based at least in part on said path of travel satellite data with data that represents the location of media displays to determine if the respondents came sufficiently close enough to the media display locations to be exposed to media displayed at the media display location."

"15. A computer-implemented method of determining the effectiveness of media displays, the method comprising:
(a) storing geo data (260) in a plurality of respondent monitoring devices (200) as said plurality of respondent monitoring devices move along respective paths of travel, at least a portion of said geo data derived from a satellite positioning system (SPS), said stored geo data (260) representing the movement of said plurality of respondent monitoring devices along said respective paths of travel; and
(b) downloading (1150) said geo data stored in said plurality of respondent monitoring devices to a post processing server (400) for:
(i) matching (1170) the locations of a plurality of media displays to positions on said respective paths of travel of said plurality of respondent monitoring devices represented by said geo data; and
(ii) rating (1190, 1195) the effectiveness of said plurality of media displays based on said matches between said plurality of media display
locations and said positions on said respective paths of travel of said plurality of respondent monitoring devices represented by said geo data."

Claims 2 to 14 and 16 to 51 are dependent claims.

Independent claim 1 of the first auxiliary request differs from claim 1 of the main request in that section a(ii) thereof relating to a processing unit is deleted, whereas independent claim 10 is identical to claim 15 of the main request.

Claims 2 to 9 and 11 to 46 are dependent claims.

Independent claims 1 and 10 of the second auxiliary request are based on claims 1 and 10, respectively, of the first auxiliary request, to which the phrase "and the direction from which each respondent is travelling" has been added (in claim 1 in section (b)(ii) preceding the term "to determine" and the phrase "and the direction from which each respondent was travelling" has been added in claim 10 at the end of section (b)(i)).

Claims 2 to 9 and 11 to 46 are dependent claims.

Independent claims 1 and 10 of the third auxiliary request are based on claims 1 and 10, respectively, of the first auxiliary request, to which the phrase "and at least one of the size of each media display, the orientation of each media display, the lighting of each media display and the presence of any blocking objects or clutter surrounding each media display" has been added (in claim 1 in section (b)(ii) preceding the term...
"to determine" and in claim 10 in section (b)(i) following the expression "the locations of a plurality of media displays").

Claims 2 to 9 and 11 to 46 are dependent claims.

Independent claims 1 and 10 of the fourth auxiliary request are based on claims 1 and 10, respectively, of the first auxiliary request. At the end of section (b)(ii) of claim 1 the phrase "the server being arranged so as to discount repeated entries and exits into a zone surrounding each location" has been added, and in claim 10 the feature "discounting repeated entries or exits into a zone surrounding each location" has been added at the end of section (b)(i)).

Claims 2 to 9 and 11 to 46 are dependent claims.

**Reasons for the Decision**

1. In the following reference is made to the provisions of the EPC 2000, which entered into force as of 13 December 2007, unless the former provisions of the EPC 1973 still apply to pending applications.

2. The appeal complies with the requirements of Articles 106 to 108 EPC and Rule 99 EPC and is, therefore, admissible.
3. Main request

3.1 Admissibility (Articles 13(1) and (3) RPBA)

The new main request filed in the oral proceedings of 19 June 2012 is identical to the former second auxiliary request which was filed with the statement setting out the grounds of appeal.

Since this request was already part of the appeal proceedings and its filing as the new main request amounts to withdrawing the former main request and first auxiliary request there was no reason not admit it into the proceedings.

3.2 Inventive step

3.2.1 General observations

Claim 1 under consideration has a mixture of technical aspects (such as the claimed elements of the apparatus and their claimed technical functionalities) and non-technical aspects (such as determining the effectiveness of media displays). It is established jurisprudence of the Boards of Appeal that, when assessing inventive step of the subject-matter of such a claim, all features of technical character are taken into account, whereas features which do not form part of a technical solution to a technical problem have to be disregarded in this assessment (see Case Law of the Boards of Appeal of the European Patent Office, 6th edition 2010, chapter I.D.8.1).
Moreover, as explained in decision T 756/06 (not published), when a claim has a mixture of technical and non-technical aspects, one of two approaches is generally followed (see T 756/06, reasons 5.): either an initial analysis of the technical character of the claimed features is made and then the inventive step of only the technical features is considered, or first the differences with respect to a relevant piece of prior art are determined and only those that contribute to the technical character are considered for inventive step. In the present case, for which document D2 constitutes a particularly relevant prior art, the Board adopts the second approach, used eg in T 641/00 - COMVIK (OJ 2003, 352).

3.2.2 From D2 (see Figures 1 to 3; the abstract; column 6, lines 60 to 64; column 7, lines 17 to 40 and 54 to 67; column 8, line 49 to column 10, line 2; column 10, lines 27 to 32; column 13, lines 2 to 7 and 49 to 63; column 14, line 53 to column 15, line 2; column 18, lines 47 to 65; column 19, lines 58 to 62; column 21, lines 9 to 20) an apparatus is known which comprises (in the terminology of the claims on file) a plurality of monitoring devices for tracking the paths of travel followed by a plurality of respondents, each of said respondents associated with a respective one of said plurality of monitoring devices. Each of said plurality of monitoring devices comprises in turn a satellite positioning system SPS engine for tracking the movement of the related respondent along the path of travel followed by the respondent and generating satellite data that represents the path of travel followed by the respondent; a processing unit for processing the path of travel satellite data; and a memory for storing said
path of travel satellite data. The known apparatus further comprises a server for collecting the path of travel satellite data from each of the monitoring devices and for analyzing said collected path of travel satellite data. According to one particular example of analyzing the collected data, the server matches geo data based on the collected path of travel data with data representing location designation information to determine the nature of destinations visited and the frequency of their visitations. The analysis allows for instance to measure changes in the frequency of visits to a particular retail store or a chain of retail outlets following the introduction of an advertising campaign (D2 : column 15, lines 6 to 8 and 24 to 27; and column 16, lines 22 to 31).

3.2.3 It follows from this analysis that the subject-matter of claim 1 of the main request differs from the apparatus known from document D2 in the specific purpose served and the corresponding operation of the server as defined in section (b)(ii), whereby the matching of collected path of travel data with location data is performed with different data sets. In particular, according to present claim 1, it is the complete set of the collected path of travel data, on the one hand, which is matched with a set of data representing the location of media displays, on the other hand, for the purpose of a different market analysis.

The contribution to the prior art is the use of the known apparatus for performing a new market analysis which requires the use of new data sets and a new algorithm for processing these data sets. These
differences themselves do not represent a technical function of the apparatus and do not contribute to the solution of any technical problem. Technical aspects first come into play with the implementation of this non-technical method and corresponding algorithm on the apparatus.

However, modification of the known analysis apparatus of D2 in such a way as to allow the determination of whether and how often a media display has been approached requires nothing more than a modification of the algorithm for the operation of the server. This, however, is a straightforward undertaking for the skilled person, a programmer, charged with the given task.

For these reasons, the subject-matter of claim 1 of the main request lacks an inventive step.

3.2.4 The appellant has argued in support of inventive step that document D2 did not disclose nor render obvious all of the technical features of the claimed apparatus and method, in particular the collection of data that represented a plurality of paths of travel data using SPS technology and the matching of the resulting data set with another data set that described a plurality of predetermined locations.

The apparatus known from document D2 served a different purpose, namely to automate data collection for consumer driving-activity surveys. D2 was concerned with tracking the movement of a motor vehicle only in an approximate manner and only during a portion of a trip in order to generate a set of trip-portion vehicle
use data. The known apparatus thus relied on different measurements and a different technical nature of the data obtained. In particular, D2 was not interested in position data obtained along the route of a respondent but only in the endpoints thereof. Moreover, according to a specific example given, successive location coordinates observed could differ by some 250 meters. This measurement spacing would be too inaccurate to be of any use in the present invention. There was no disclosure in D2 of technology suitable for creating specific data sets, one being a path of travel data set and the other being a predetermined location data set, much less of matching two such data sets.

The present case was distinguished from the factual situation underlying the findings in point 20 of the Reasons of Board of Appeal decision T 154/04 (OJ 2008, 46) in that the subject-matter of present claim 1 comprised technical features which contributed to a technical solution of a technical problem. This problem was how to measure which of a plurality of respondents had been in a position to be exposed to a certain media display. The technical solution consisted in performing "real world" measurements by gathering satellite data, obtaining therefrom "real world" geo data and comparing this data with another set of "real world" position data. The reason for providing these functionalities and for executing these measurements indeed involved a certain business interest, but that did not deprive the claimed subject-matter of its technical nature. The result of the data comparison amounted to a specific measurement, namely of the number of respondents whose travel paths came close enough to a media display, and
a measurement, for whatever purpose, must be considered technical.

3.2.5 These arguments are not convincing, in particular due to the fact that they ignore the extent of the teaching provided by the prior art.

The apparatus known from document D2 possesses the same structural configuration as the claimed apparatus and all the technical functionalities thereof. In particular, as shown in paragraph 3.3.2 above, is it foreseen in the known apparatus to continuously gather satellite data and process this data into geo data which is representative of the (complete) paths of travel followed by a plurality of respondents (D2: column 6, lines 60 to 64; column 7, lines 28 to 40; column 8, lines 49 to 57; column 13, lines 2 to 7 and 49 to 63; column 18, lines 47 to 65). Likewise, the known apparatus performs a comparison or matching of the thus obtained geo data with another data set describing a plurality of predetermined locations, such as the locations of retail-stores (D2: column 15, lines 6 to 9 and 24 to 27; and column 16, lines 28 to 31). Although the comparison performed in D2 only takes the destination of the route into account and does not compare the entire route with the predetermined locations, this may nevertheless be considered to be a matching of "geo data" with data representing the predetermined locations. Moreover, in D2 successive location coordinates are indeed gathered at spaced intervals (D2: column 18, lines 62 to 65), but this does not result in a difference between the subject-matter of claim 1 of the main request on file - which only requires that the paths of travel are "tracked" -
and the teaching of D2. In fact, according to dependent claim 11 of the main request on file (and page 5, lines 16 to 17 of the application description) the satellite data is collected at predetermined intervals.

With regard to the technical nature of the "measurement", the Board emphasises that, using the COMVIK approach, the features which are known from D2 do not have to be identified as technical or non-technical (see also T 756/06, reasons 5.). In the present case, as set out in paragraph 3.3.3 above, the only differences between the claimed subject-matter and the teaching of document D2 lie in the nature of the business activity exercised and the nature and information content of the data sets that are to be compared by the server. The "real world", ie technical, features of claim 1 are all known from D2.

In the light of the established differences, also the formulation of the problem given by the appellant is incorrect. Setting out from the teaching of document D2, the problem was not "how to measure" something but, instead, how to modify the known apparatus so as to provide a specific piece of information, ie which of a plurality of respondents had been in a position to be exposed to a certain media display.

In analogy to T 154/04 (OJ 2008, 46), the Board considers that creating information about advertising exposure is a business research activity which does not serve to solve a technical problem relevant to any technical field. More specifically, the gathering and comparing of geographic location information in the present application - the "real world" data analysis
referred to by the appellant - serves the sole purpose of determining the effectiveness of media displays which is not a technical, but rather a business, problem. Moreover, the business research activity does not contribute anything technical to the act of establishing whether the path of travel has come close enough to the known locations of media displays to allow the media display to be recognized. The only technical aspect of the claimed solution lies in adapting the server and its operating algorithm to the concrete needs of the desired data analysis. However, the execution of the necessary reprogramming of the known server for this purpose is a routine task for the skilled person.

3.2.6 For the above reasons, the Board arrives at the conclusion that the subject-matter of claim 1 of the appellant's main request is rendered obvious in view of the teaching of document D2.

Consequently, the appellant's main request does not meet the requirement of Article 52(1) EPC and Article 56 EPC 1973 having regard to inventive step and is therefore not allowable.

4. First auxiliary request

4.1 Admissibility

The first auxiliary request corresponds to the former fifth auxiliary request which was filed slightly less than one month before the date of the oral proceedings with the letter of 21 May 2012.
Nevertheless, given the fact that the request differs from the present main request only in the deletion of a feature from claim 1 and of some of the dependent claims and thus does not raise new questions, the Board has exercised its discretion under Articles 13(1) and (3) RPBA in favour of admitting the first auxiliary request into the proceedings.

4.2 Inventive step

Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the feature "a processing unit (210) for processing the path of travel satellite data" has been deleted.

This amendment responds to an objection under Article 123(2) EPC raised in the Board's communication of 18 January 2012 but, as conceded by the appellant, has no bearing on the assessment of inventive step given above for the subject-matter of claim 1 of the main request.

Therefore, for the same reasons as set out for the main request, the first auxiliary request does not meet the requirements of Article 52(1) EPC and Article 56 EPC 1973 and is not allowable.

5. Second to fourth auxiliary requests - admissibility

5.1 Independent claims 1 and 10 of all of these requests are amended by the addition of features which stem from the application description.
These amendments were filed for the first time at the oral proceedings before the Board and thus at an extremely advanced stage of the appeal proceedings.

5.2 Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA) stipulates that "any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy."

Article 13(3) RPBA complements this, by stating that "amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the Board or the other party or parties cannot reasonably be expected to deal with without adjournment of the oral proceedings."

Moreover, the case law of the Boards of Appeal has established a variety of criteria for the admission or rejection of amended claims in appeal proceedings (cf. chapter VII.E.16. of the 6th edition of the "Case Law of the Boards of Appeal of the European Patent Office"). Among these criteria are, for example, whether the amendments respond to new objections, whether the amended request is clearly allowable, or whether the need for an additional search arises.

5.3 The appellant argued in favour of admitting these late-filed requests since they answered objections which were raised for the first time in the Board's communication. By this communication the Board had
introduced a new document (document D2) into the proceedings and, by relying on D2, the Board's preliminary assessment of the main request and first auxiliary request was based on different arguments than the contested decision. Moreover, third party observations had been filed only five weeks before the date of the oral proceedings and it was not clear to the appellant to what extent these observations would play a role in the oral proceedings. The appellant's written request - with reference to G10/93 - for remittal of the case to the first instance so as to allow the matter of inventive step in view of the new document D2 and, possibly, the third party observations to be discussed in two instances had been refused. Moreover, the appellant's request for a second postponement of the oral proceedings had also been refused. Therefore, procedural fairness required the new auxiliary requests to be admitted into the proceedings and either to be dealt with by the Board or to be remitted to the examining division for further prosecution.

Furthermore, there was no reason why the Board could not reasonably be expected to deal with the second to fourth auxiliary requests without adjournment of the oral proceedings. The respective amendments did not raise new questions and were easy to examine. They responded to the Board's objections as to lack of inventive step, were clear and their basis of disclosure as independent measures could be readily verified.

5.4 The amendments filed with the second to fourth auxiliary requests are not occasioned by new objections
which arose for the first time either shortly before or in the oral proceedings before the Board. Indeed no new objections were raised by the Board in the five month period between dispatch of the communication and the date of the oral proceedings.

The fact that the Board relied in its preliminary opinion on a document which it had introduced into the proceedings of its own motion does not justify the filing of substantive amendments at such a late stage of the appeal proceedings. Indeed, document D2, which had been known to the appellant from a US search report in one of its parallel US applications, was introduced into the appeal proceedings, together with a detailed presentation of its relevance, with the Board's communication of 18 January 2012 annexed to the summons to oral proceedings that were originally scheduled for 3 April 2012 and then postponed to 19 June 2012. Thus, the appellant had ample time and opportunity to become familiar with this piece of prior art and, if so desired, to respond to it by way of amendment of its requests. In fact, in the submissions of 21 May 2012, the appellant addressed document D2 in detail. However, the only amendments which were filed were directed to clarity and added subject-matter issues. If the current second to fourth auxiliary requests had been proposed together with these other requests of 21 May 2012 at least the Board would not have been taken by surprise in the oral proceedings.

Neither can the refusal of the appellant's earlier request for immediate remittal of the case to the examining division so as to allow consideration of D2 at two instances justify such late-filed amendments. As
an aside it is noted that in the present case, in which
the application had been refused by the examining
division for lack of inventive step with respect to
document D1, a finding the result of which the Board
tended to share, remitting the case for repeating the
examination of the same issue on the basis of an even
more relevant document, such as document D2, would have
wasted the Office's resources and neglected the general
public's interest in knowing as soon as possible
whether or not it had to respect a patent.

5.5 Furthermore, the disparate amendments proposed to the
independent claims of the three requests concern matter
that was at no time claimed in examination and appeal
up to the oral proceedings before the Board.

Substantive amendments at such an advanced stage of the
appeal proceedings would normally be accepted only
under exceptional circumstances, in which the amended
subject-matter would for instance be immediately
allowable.

This is not the case here. On the contrary, prima facie
doubts arise as to added subject-matter (Article 123(2)
EPC), clarity (Article 84 EPC) and inventive step
(Article 56 EPC).

For instance, it appears doubtful that the amendments
would preserve the proper context of disclosure and
there appears to be no basis for the extraction of
isolated features from their disclosed context. The
amendment "and the direction from which each respondent
is travelling" made to claim 1 of the second auxiliary
request apparently constitutes an abstraction from the
statement "In block 1610 the geo data is examined to detect all routes that cross the location zone at different times from a direction (or directions) of interest" on page 31, lines 2 and 3 of the published description, which statement in turn forms part of the description of the specific embodiment of Figure 16. It is not evident, where the basis in the original application would be for the claimed abstraction of this specific embodiment. For example, no basis appears to exist for generalising the disclosed concept of detecting all routes that cross the location zone at different times from a direction of interest to simply comparing the path of travel data to location data and direction of travel data. Similar doubts as to added subject-matter arise for the amendments made to the third and fourth auxiliary requests.

As an example for potential problems concerning clarity, reference is made to the amendment "discounting repeated entries of exits into a zone surrounding each location" in claim 10 of the fourth auxiliary request. This amendment does not appear to be compatible with the determination of exposure, reach and frequency values or daily effective circulation ratings, which are the subject of dependent claims 38 to 43.

Finally, it is not apparent that the proposed amendments would add further technical features to the claimed subject-matter and thus address the aforementioned problem of lack of inventive step.

It follows that, if the second to fourth auxiliary requests had been admitted into the proceedings, the
Board would have had to perform fresh substantive examinations on each of the requests in order to establish whether the requirements of the EPC are met. It cannot reasonably be expected from a board of appeal to accomplish such a task without any appropriate preparation in the tight time frame of oral proceedings. In such cases, Article 13(3) RPBA provides that the amendments shall not be admitted.

5.6 For the above reasons, the amendments made to the second to fourth auxiliary requests raise issues which could not be dealt with without adjournment of the oral proceedings, do not respond to fresh objections and are not clearly allowable.

The Board thus did not admit the second to fourth auxiliary requests into the proceedings.

6. Concerning the appellant's request to admit the second to fourth auxiliary requests and to send them back to the first instance for further prosecution, the Board notes that this would not be commensurate with the principle of procedural economy. Moreover, the question of a "loss of instance", which decision G 10/93 (OJ 1995, 172) indicated is one factor which the Board should take into account when deciding whether to rule on the case itself or to remit the matter to the examining division, would only be considered if the Board had admitted the requests into the proceedings.

Therefore, the fifth auxiliary request, to remit the case to the examining division for further prosecution on the basis of the second to fourth auxiliary requests is refused.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar                                      The Chairwoman

R. Schumacher                                      F. Neumann