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Datasheet for the decision of 13 November 2018

Case Number: T 1325/17 - 3.5.06

Application Number: 07718070.1

Publication Number: 1999665

IPC: G06F15/16, G06Q10/00, G06Q30/00

Language of the proceedings: EN

Title of invention:
INTERACTIVE ADVISORY SYSTEM

Applicant:
Locator IP, LP

Headword:
Location-based dating/LOCATOR

Relevant legal provisions:
EPC 1973 Art. 56, 84
EPC Art. 123(2)

Keyword:
Amendments - added subject-matter (no)
Claims - clarity (no)
Inventive step - all requests (no)

Decisions cited:

Catchword:

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Case Number: T 1325/17 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 13 November 2018

Appellant: (Applicant)	Locator IP, LP 385 Science Road State College, PA 16803 (US)
Representative:	Richards, John Ladas & Parry LLP Temple Chambers 3-7 Temple Avenue London EC4Y 0DA (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 23 January 2017 refusing European patent application No. 07718070.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	W. Sekretaruk
Members:	M. Müller
	A. Teale

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division, with reasons dated 23 January 2017, to refuse European patent application No. 07 718 070 for lack of compliance with Article 123(2) EPC and lack of inventive step, Article 56 EPC, over the document

D5: WO 2004/070993 A2.

Further documents were mentioned in the decision but not relied upon in its reasons, in particular

D1: WO 02/21864 A1,
D2: WO 2004/059996 A1, and
D3: EP 1 473 684 A1.

II. A notice of appeal was filed on 13 March 2017, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 11 May 2017. The appellant requested that the decision be set aside and that a patent be granted on the basis of the claims according to the main or the auxiliary request as refused (filed on 2 September 2016 and 21 September 2016, respectively), or according to the second auxiliary request as filed with the grounds of appeal, in combination with the description pages 1-24 as published and pages 24a-24c as filed on 16 February 2009, and the drawing sheets 1-5 as published.

III. In an annex to a summons to oral proceedings, the board informed the appellant of its preliminary opinion that the claimed invention lacked inventive step, as the obvious automation of known and non-technical methods,

but also indicated that prior art documents (in particular D1-D3) disclosed similar location-based services and might have to be considered more closely during the oral proceedings. Objections under Articles 84 EPC 1973 and 123(2) EPC were also raised.

IV. In response to the summons, with a letter dated 9 October 2018, the appellant filed amended claims 1-14 according to a new main request and new auxiliary requests 1 and 2. On 12 November 2018, the appellant further indicated that it would not attend the scheduled oral proceedings and requested that "a decision be issued on the basis of the current state of the application".

V. The oral proceedings were then cancelled.

VI. Claim 1 of the main request reads as follows

"A method for locating at least one locatee located remotely from a broadcast network, comprising the steps of:

receiving user-profile criteria from a communicator device associated with a locator;

receiving user-profile criteria from a communicator device associated with a locatee;

updating, automatically and continuously, a communicator location database with real-time spatial locations of the communicator devices;

matching the user-profile criteria associated with the locator with user-profile criteria associated with the locatee as well as real-time locations of the communicator devices associated with the locator and the locatee to generate a data set of locatees having similar user-profile criteria and being within a pre-

determined spatial range with respect to the communicator device associated with the locator; and

transmitting the data set of locatees to the communicator device associated with the locator based upon the matching of the user-profile criteria associated with the locator with the user-profile criteria associated with the locatee."

Claim 1 of auxiliary request 1 reads as follows

"A method, comprising:

receiving locator user-profile criteria from a locator, the locator user-profile criteria including user profile information regarding the locator;

receiving locatee user-profile criteria from a locatee;

receiving information indicative of a real-time spatial location of a locator communicator device associated with the locator;

receiving information indicative of a real-time spatial location of a locatee communicator device associated with the locatee;

updating, automatically and continuously, a communicator location database with real-time spatial locations of the communicator devices;

matching, by an analysis unit, the locator user-profile criteria with the locatee user-profile criteria as well as the real-time locations of the communicator devices to generate a data set of users having similar user-profile criteria;

outputting the locator user-profile criteria to a communications network for transmittal to the locatee in response to a determination that the data set of users includes the locatee;

receiving permission from the locatee;

enabling the locator to contact the locatee in response to the permission from the locatee; and

enabling the locator to add information relating to the locatee which is hidden from the locatee and which is shareable with users other than the locatee."

Claim 1 of auxiliary request 2 is identical to claim 1 of auxiliary request 1 except that the following step of "storing" was introducing after the first two "receiving" steps:

"storing said user-profile criteria in a user profile database".

All requests also contain a second independent method claim 10. The wording of these claims is immaterial for this decision.

Reasons for the Decision

The invention

1. The application concerns two location-based services relating to location-based dating and people tracking, respectively.

2. In the dating application, users provide "profiles" comprising information about themselves and about the people of interest to them (personal characteristics or traits). In other words, users describe themselves and the person they are looking for (see paragraph 80; and figure 5, nos. 80c, 84c, 86c). The description uses the term "locatee" for "a person to be located" and

"locator" for "a person trying to locate a locatee" (see paragraph 78).

2.1 Each user has an associated "communicator device", typically a mobile phone (*loc. cit.*; and figure 5, nos. 11c and 11d). These are tracked, and their current locations are held in a "communicator location database" (see paragraph 78; figure 5, no. 16c).

2.2 An "analysis unit" compares user-profiles against each other. More specifically, it compares a locator's search criteria against the locatees' self-descriptions (see e.g. paragraphs 81 and 84). The search may be limited to locatees within a "designated spatial range" around the locator's location (see paragraph 85).

2.3 When a match is found, information about the locator may be sent to the matching locatee. Conversely, further information about the locatee may be transmitted to the locator, possibly subject to the locatee's prior permission. The locator can then decide whether or not to contact the locatee(s). Alternatively, the system may send such a contact message automatically (see paragraph 81).

3. In the people tracking application, the analysis unit receives information about a locatee's destination or "range of travel". The analysis unit may detect a tracked locatee leaving the indicated range of travel, or a locatee entering an area "geo-referenced" as a "bad area" (see paragraph 93), and alert the locator accordingly. The locator may also be informed when locatees arrive at their destination or do not arrive there by an expected time (paragraph 98). Consent by the tracked "locatee" may be required (paragraph 95).

The scope of this decision

4. The two services are separately claimed, in claims 1 and 10, respectively, of all pending requests. Due to their substantial differences, their inventive merit must be separately assessed. In the annex to its summons to oral proceedings, the board considered both independent claims and gave reasons why it appeared that none of them could be allowed. As is explained below, the board maintains this conclusion for the "location-based dating" service according to claim 1. The decision must be confirmed for that reason alone. Although the board has no occasion to deviate from its preliminary opinion regarding the "people tracking" service either, this issue need not be decided. No further reference will thus be made to the "people tracking" service below.

Clarity, Article 84 EPC 1973, and claim construction

5. Claim 1 of all requests specifies a step of "enabling the locator to contact the locatee". The board takes it that this feature is satisfied by, for instance, providing the locatee's email address or telephone number to the locator. This interpretation was offered in the board's preliminary opinion and was not challenged by the appellant.

6. Claim 1 of the main request relates to a "locatee located remotely from a broadcast network". It is unclear how this fact is meant to limit the claimed method. Notably, a locatee "located remotely from a", i.e. from one, "broadcast network", may well be within the range of another such network, and a method that works "remotely" from any broadcast network should also

work within the range of such a network. In response to that objection with regard to claim 10, the appellant deleted the feature (see its letter of 17 October 2018, page 2, penultimate paragraph). For the purposes of the inventive step assessment of claim 1, it will therefore be regarded as non-limiting.

7. Claim 1 of all requests does not specify who/what is to carry out the method steps, except for the "matching" step of claim 1, which is carried out by an "analysis unit". Claim 1 thus does not require a fully automatic method. It could be a person "receiving user-profile criteria" and "storing them in a user-profile database", or "receiving permission from the locatee" and "enabling the locator", as claimed. The board considers that this renders claim 1 of all requests unclear, Article 84 EPC 1973.

8. Claim 1 of auxiliary requests 1 and 2 specifies a further step of "enabling the locator to add information [...] which is hidden from the locatee and [...] shareable with users other than the locatee".

8.1 This phrase is unclear for several reasons. Firstly, it is unclear how information is characterised by being "hidden" and "shareable". Secondly, it seems that information which is shareable with users "other than the locatee" is, in principle, also shareable with the locatee. Thirdly, it is unclear how a step of "enabling to add information" can be characterized by whether or not the information is hidden or shareable. Finally, claim 1 does not specify to what a locator is to "add" the mentioned information.

8.2 The appellant explained in its letter of 9 October 2018 (page 2, paragraph 1), with reference to paragraph 83

of the description, that this feature is meant to express that locators may leave comments on individual locatees for future locators, but not the locatees themselves, to see. For example, one locator might want to inform others that a particular locatee has lied about his or her age.

8.3 The board notes, however, that this explanation does not overcome the objection. In particular, the claims in question do not specify where the information may be added by the "locator" and how the intended hiding and sharing is achieved.

8.4 The board concludes that claim 1 of auxiliary requests 1 and 2 is also unclear for this reason, Article 84 EPC 1973.

Article 123(2) EPC

9. Claim 1 of auxiliary requests 1 and 2 specifies steps of "receiving permission from the locator" and "enabling the locator to contact the locatee in response to [that] permission".

9.1 In its decision, the examining division raised an Article 123(2) EPC objection to these steps, arguing effectively that the claim required, but the description did not disclose, two separate permissions by the locatee, one to transmit data to the locator and another to allow the locator to contact the locatee (see point 16.1 of the reasons). The board disagrees.

9.2 Paragraph 81 of the description as originally filed discloses that the locatee may have to give permission to the transmission of a "data set" to the locator, who, then, "can review the data set to determine a

locatee to contact". No separate, second permission by the locatee is disclosed.

9.3 Hence, the locatee's permission to transmit the data must be construed as implying a permission to be contacted, and thus "enables" the locatee to contact the locator within the meaning of the claim. Also claim 1 does not specify a dedicated permission to contact the locatee.

The decision under appeal

10. In its decision, the examining division specified, for the independent claims separately, two methods which it considered to be "commercial services" and thus not relevant for assessing inventive step (see points 17.1 to 17.1.3 of the reasons). It then identified D5 as the "closest prior art", because it disclosed "the provision of real-time location based services to mobile users and [...] the technical features of claim[s] 1 and 10", and considered the technical problems to be "the implementation of the considered business scheme [...] when starting from the identified closest prior art" (see points 17.2 to 17.4 of the reasons, in particular points 17.3.2 and 17.4.2).

10.1 The appellant challenged this finding by listing the technical differences it saw between the claimed invention and D5, some of which related to the different nature of the services (see e.g. the grounds of appeal, page 3, first and third "bullet" points, and page 5, first "bullet" point).

10.2 The board considers that the inventive step objection by the examining division indeed lacks a crucial

detail. The board takes the view that the objective technical problem considered in the problem-solution approach must be one which can realistically be assumed to have arisen at the priority date in order to allow the conclusion that, having regard to the state of the art, a claimed solution would have been obvious to a person skilled in the art (Article 56 EPC 1973). If the objective technical problem is formulated as to find a - i.e. any - implementation of a given non-technical method and a prior art document discloses a suitable platform, an inventive step objection requires an argument as to why the skilled person would have chosen the known platform to implement the method. Alternatively, if the assessment starts from prior art showing the implementation of another non-technical method on some platform and the objective technical problem is formulated as to modify that prior art solution into one which implements the desired method, an argument is required as to why the skilled person would have considered modifying or replacing the disclosed method.

10.3 Accordingly, the board considers that the examining division should have addressed the question of why "the considered business scheme" was one which the skilled person would have considered implementing on the specific platform according to D5. However, even though the board does not fully agree with the reasons given in the decision, it comes to the same conclusion as regards inventive step.

The prior art

11. D1 discloses a "location dependent user matching system" (title). A central server receives "preference

or profile information" associated with two "mobile communication devices" and "location information" relating to the devices, matches them and sends the location of one device to the other in case of a match (see abstract, figure 3, and the scenarios disclosed on page 27, line 6, to page 37, line 14).

12. D2 discloses a location-based system in which mobile devices "are able to receive or provide services in dependence of their geographical position" (see abstract). It is also disclosed that the user of one device may recognize the user of another device so that it can, for instance, decide in which direction to travel to meet the corresponding user (see e.g. page 4, paragraphs 2 and 3) or whether to send targeted advertisement (page 6, paragraphs 2 and 3).

13. D3 relates to "creating an interest community" of mobile device users (see title). Again, user profiles are stored in a central server (see figures 4 and 5), compared, and users are alerted in case of a match (see paragraph 15).

14. D5 discloses an architecture for the delivery of customized weather reports to users based on externally provided weather information, users' interests as expressed in users' profiles and the real-time location of the users' communicator devices (such as mobile phones; see figure 1, paragraphs 36-37 and 45-46).

Inventive step

15. The board considers that it is a realistic - and indeed well-known - situation that someone (a "locator") is interested in contacting other people (the "locatees") with common interests in the same area. For instance,

lonely hearts advertisements in the print media respond to this interest. Moreover, D1 discloses that teenagers might be interested in meeting other teenagers in a particular place and according to particular criteria (see pages 27 *et seq.*, in particular page 28).

15.1 Such scenarios typically come with temporal and spatial requirements. Persons looking for partners may prefer people living in the locality (in the same postal/zip code, say). Persons looking for company on a planned trip or a concert are interested in people who can make themselves available in a particular place and at particular time. This holds all the more for the cited example in D1 in which teenagers look for matches "here and now".

15.2 Likewise, it is commonly known, and natural, that potential locatees may not always want to be found in person. Lonely hearts advertisements, for instance, typically contain a box number rather than a full address. The locatee receiving a letter at a box number can still decide whether to reveal his or her address or telephone number so as to be contacted by the locator.

15.3 The board thus considers that a problem that might realistically arise is to provide an automated service enabling a "locator" to find "locatees" with similar interests or traits for some joint activity "here and now", while protecting the locatee's privacy.

16. The board considers that the problem of finding "similar interests" implies that the interests of locator and locatee be specified (as "user-profile criteria") and "receiv[ed]". Likewise, the problem of finding someone "here and now" requires that a

reasonably "real-time spatial location" be "received". And any automated solution as specified requires some "analysis unit" carrying out the claimed "matching".

17. The following features do not immediately follow from the specified problem:

(a) using communicator devices for providing their owner's real-time location, for inputting "user-profile criteria" and for receiving information about determined matches,
(b) storing the user-profiles in a database,
(c) storing the (latest) locations in a database, and
(d) notifying the locatee if a match is found and requesting permission for a contact,
(e) enabling the locator to add further information.

Feature (b) is relevant only for auxiliary request 2, and feature (e) only for auxiliary requests 1 and 2.

17.1 *Re (e)* In view of the above clarity objection to this feature, it can, at best, be interpreted broadly. That said, the board considers that any communication path via which locators can provide their "user-profile criteria" can, in principle, also be used (i.e. "enabl[es] the locator") to "add" any other "information", hidden or not. From this perspective, feature (e) is implied by feature (a).

17.2 The board considers that features (a)/(e), (b) and (c), and (d) address different and independent problems, the inventive merit of which may thus be assessed separately. Features (a) and (e) provide a way for users to provide and receive the information as required by the system, i.e. they provide the system's interface. Features (b) and (c) address the problem of

managing the relevant data and feature (d) addresses the users' privacy requirement.

17.3 *Re (a)* In the board's judgment, location-based services were generally known which used the users' "communicator devices" to represent the users' identity and location and which served as a user interface to the system. Each of documents D1-D3 and D5 discloses one or more examples of this. The board therefore considers that it would have been obvious for the skilled person to use users' "communicator devices" to implement some of the required features, in particular the location tracking and the communication with locator and locatee.

17.4 *Re (b) and (c)* In the board's judgment, the use of "databases" is a commonly-known - and thus obvious - solution to managing data collected for each user, user-profile and location.

17.5 *Re (d)* It is a matter of privacy and personal choice to ask matching locatees whether they are interested in contact with a locator. This is a non-technical idea and also common. A reader of a lonely hearts advertisement ("locator") will write to the author ("locatee") via a box number and it is up to the author to decide whether or not to reply to the letter and get in touch. Feature (d) is thus an obvious and known solution to a known and non-technical problem, and implementing that solution in the given technical context is straightforward.

17.6 In response to this analysis, the appellant, in its letter of 9 October 2018, challenged the board's "categorization of all features of the claims but (a)-(e) as

obvious or non-technical", arguing that "matching, by an analysis unit, the [...] user-profile[s] as well as the real time locations [...] requires a corresponding technical solution", in particular the "use of a computer or server" (see page 4, middle paragraph). The board notes that the technical nature of the solution and, in particular, of the mentioned individual features is accepted and addressed in the board's analysis. The appellant did not submit more specific arguments in this regard.

18. Moreover, the appellant challenged the board's finding that the lonely hearts advertisement examples "encompass the privacy features of the claims" (feature (d)), because the author of such an advertisement could not "preclude a reader from writing to her in the first place" (see page 4, last paragraph). This argument is not pertinent however. Also claim 1 specifies that the locatee's permission is "receiv[ed]" only after the user-profile's have been matched, i.e. only after, in the lonely hearts scenario, the reader has found a matching advertisement and indicated that by writing to its author. The author can, then and on a case-by-case basis, respond and, by doing so, give "permission" in the form of contact information to "enable the locator to contact the locatee".

19. In summary, the appellant's response could not sway the board's opinion that the subject-matter of claim 1 of all requests lacks inventive step as the obvious solution of a non-technical problem, Article 56 EPC 1973.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

B. Atienza Vivancos W. Sekretaruk

Decision electronically authenticated