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**Datasheet for the decision  
of 25 January 2012**

**Case Number:** T 1943/08 - 3.5.06

**Application Number:** 01991039.7

**Publication Number:** 1374013

**IPC:** G06F 1/00

**Language of the proceedings:** EN

**Title of invention:**

System and method for using location identity to control  
access to digital information

**Applicant:**

GeoCodex LLC

**Headword:**

Geocoding/GEOCODEX

**Relevant legal provisions (EPC 1973):**

EPC Art. 83, 84  
EPC R. 27(1)(e)

**Keyword:**

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**Cited Decisions:**

T 0465/97

**Catchword:**

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Case Number: T 1943/08 - 3.5.06

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.06  
of 25 January 2012

**Appellant:** GeoCodex LLC  
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**Representative:** Haines, Miles John L.S.  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 16 May 2008  
refusing European patent application  
No. 01991039.7 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman:** A. Teale  
**Members:** M. Müller  
M.-B. Tardo-Dino

## Summary of Facts and Submissions

I. The appeal lies against the decision of the examining division, dispatched on 16 May 2008, to refuse European patent application no. 01991039.7 for lack of an inventive step, Article 56 EPC 1973, in view of the following documents:

D1: EP 0 997 808 A2

D2: US 5 640 452 A

II. Notice of appeal against this decision was received on 10 July 2008. The appeal fee was paid on 11 July 2008 and a statement of grounds of appeal was received on 16 September 2008. In the grounds of appeal, a new document was referred to:

D3: US 4 418 425 A

III. The appellant requests that the decision be set aside and that a patent be granted based on the main or first auxiliary request that were subject to the decision. The auxiliary request was not filed in writing. Instead its claim 1 was specified orally as the combination of claims 1 and 14 of the main request (cf. minutes of oral proceedings, point 2).

IV. The appellant also requests that the appeal fee be refunded due to an alleged substantial procedural violation. The appellant challenges the decision under appeal for arguing lack of inventive step based on a summary of D3 contained in D2 and without reference to D3 itself. Thereby, so the argument, the examining division had deliberately and knowingly misinterpreted D2

in breach of good faith which would amount to a substantial procedural violation and justify reimbursement of the appeal fee.

V. Claim 1 according to the main request reads as follows.  
"A method for controlling access to digital information (130), comprising:

generating a location identity attribute (140) that defines at least a specific geographic location and an area parameter (143) defining a region that encompasses said specific geographic location;

combining said area parameter with said location identity attribute to yield an encryption key (170);

encrypting said digital information using said encryption key, wherein said digital information can be accessed from said encrypted digital information (314) only at said specific geographic location; and

enforcing said location identity attribute by allowing access to said digital information from said encrypted digital information only at said specific geographic location, wherein said enforcing step further comprises identifying the location of an appliance through which access to said digital information is sought and comparing said appliance location to said specific geographic location defined by said location identity attribute, and allowing decryption of said digital information only if said appliance location fails within said specific geographic location."

Claim 14 according to the main request reads as follows:

"The method of Claim 1, wherein said enforcing step further comprises generating a decryption key based at least in part on said specific geographic location, said decryption key being thereby used to decrypt said digital information."

Claim 1 according to the auxiliary request is, by definition as the "combination of claims 1 and 14" of the main request, identical in scope with claim 14 of the main request which includes by reference all the features of claim 1.

- VI. In an annex to the summons to oral proceedings the board informed the appellant as to how it interpreted its requests. Furthermore the board expressed its preliminary opinion that the application infringed both Articles 83 and 84 EPC 1973, that the claimed invention lacked an inventive step over D1 in combination with either D2 or D3, and that the request that the appeal fee be refunded would have to be refused.
- VII. In response, the appellant did not file any substantive arguments or any amendments but indicated its intention not to attend the oral proceedings.
- VIII. Oral proceedings were held as scheduled. At the end of the oral proceedings the chairman announced the decision of the board.

## Reasons for the Decision

### *Appellant's absence at Oral Proceedings*

1. The duly summoned appellant did not attend the oral proceedings. In accordance with Article 15(3) RPBA the board relied for its decision only on the appellant's written submissions. The board was in a position to decide at the conclusion of the oral proceedings, since the case was ready for decision (Article 15(5,6) RPBA), and the voluntary absence of the appellant was not a reason for delaying the decision (Article 15(3) RPBA).
2. The following reasons are based on the board's preliminary opinion annexed to the summons to oral proceedings.

### *The Invention*

3. The invention is concerned with limiting access to digital information to appliances at a specific, pre-defined geographical location. More specifically, the description proposes to encrypt the information with a key which is based, "at least in part", on the geographic location at which access should be allowed. The appliance desiring access will generate a decryption key *inter alia* from its location in such a way that the decryption key matches the encryption key only if the appliance location is within the allowed region (see description, page 5, lines 20-22; page 15, lines 13-15; page 16, lines 19-23).

*Article 84 EPC 1973*

4. The independent claims of both requests - *i.e.* claims 1 and 22 of the main request and at least claim 1 of the auxiliary request - lack clarity and support for a number of reasons, contrary to Article 84 EPC 1973.
- 4.1 The independent claims of both requests specify the generation of a "location identity attribute (140) that defines ... a specific geographic location" and, separately, of an "area parameter (143) defining a region that encompasses said specific geographic location". In the description it is disclosed that the "location identity attribute" comprises two items of information, namely a location value and a proximity value, and that the "area parameter" may correspond to the "proximity value" (cf. fig. 2; page 9, lines 22-23; page 15, lines 25-26). This would appear to mean that the area parameter alone cannot define a region encompassing the geographic location but rather only its extent (cf. page 9, lines 28-29).
- 4.2 The independent claims of both requests further specify that an appliance seeking access to digital information will compare its own location to the "geographic location defined by said location identity attribute". In the board's view this implicitly requires that "said location identity attribute" - in total or in part - is available to the appliance even though the claims do not explicitly specify this fact.
- 4.3 The description does not disclose anywhere that the entire "specific geographic location defined by said location identity attribute" is stored with the digital

information and hence does not support this information being available to the appliance for the claimed comparison. This is in conflict with claim 14 of the main request and claim 1 of the auxiliary request which specify the generation of a decryption key "based at least in part on said specific geographic location".

4.4 The description does disclose however that the area parameter is attached to the digital information in cleartext form (page 16, lines 3-4) which makes it available to the appliance. The board considers this to be an essential feature missing from the claimed invention.

4.5 The independent claims of both requests specify that the area parameter and the location identity attribute are combined to yield an encryption key without specifying any detail about how this is meant to be done. The same applies to claim 1 of the auxiliary request insofar as it specifies that a decryption key be generated but does not specify how this is done, let alone in such a manner that both keys would match.

4.6 In the board's view these are also essential features of the invention missing from the claims, *inter alia* because they are the only ones which could explain how the claimed result of "allowing access ... only at said specific geographic location" is achieved.

4.7 Where the independent claims specify that access should be allowed only "at said specific geographic location" (see e.g. claim 1, claims page, line 10), which is defined by the "location identity attribute", rather than, less stringently, only within the region defined



by the area parameter it is unclear what role the area parameter plays in the claimed invention.

*Article 83 EPC 1973*

5. The board also finds that the invention is not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, contrary to Article 83 EPC 1973.
6. The description does not disclose any specific example of how encryption and decryption keys are to be generated, neither based on the location identity attribute and the area parameter as claimed, nor from geographic location information in more general terms. This constitutes a violation of Rule 27(1)(e) EPC 1973 which requires that the description disclose in detail at least one way of carrying out the invention.
7. The board furthermore considers that it is not evident for the skilled person how to carry out the invention as claimed without such a detailed description for the following reasons.
  - 7.1 The board concedes that the skilled person would know at least one way of generating a key from geographic location information, for instance by using the geographic coordinates themselves as the key. This would work, in principle, at least for symmetric cryptography in which the encryption and decryption keys are the same: an appliance at precisely the location from which the encryption key was generated would be able to regenerate the key from its location alone. It is not evident

however how this would work when the appliance location differed from the location used for encryption.

7.2 An appliance could also regenerate the decryption key if the original location were attached to the digital information in cleartext. Obviously this would defeat the purpose of the invention because the digital information could then be accessed independently of the appliance location. The description concedes this by disclosing that only the area parameter is attached to the digital information and that it should be impossible to generate the key from the area information alone but possible to generate it in combination with the appliance location (see page 16, lines 3-7).

7.3 Typically, the appliance location will be different from the location used for encryption. Hence generation of the encryption key must be based on different information than generation of the decryption key. How this is possible is, in the board's view, not evident. In fact, the board is of this opinion for the simpler case of symmetric cryptography and - even more so - for asymmetric (*i.e.* public key) cryptography to which the invention "could be adapted" as the description mentions in passing but without any further explanation (page 16, lines 25-28). It is nowhere disclosed in the description how geographic information could be integrated into the key generation for public key cryptography.

7.4 The deficient disclosure of the application may be illustrated by way of the following two examples.

*Example 1:* Imagine that certain digital information should be accessible in a region defined by a circle of 50 km around the centre of Munich (cf. page 10, lines 26-27). The encryption key would hence be generated by the coordinates of the centre of Munich and the area information defining a circular region around it. To allow access in, say, the town of Freising it must be established that Freising lies within 50 km of the centre of Munich (which is the case). In this scenario, both keys may be generated from the same region information, but it is not clear how the calculation of the decryption key should take into account the specific geographic location (e.g. the coordinates) of Freising as the appliance location.

*Example 2:* Imagine that digital information is encrypted in Brasilia and should be accessible anywhere in Brazil (cf. page 11, lines 2-3). To allow access in Rio de Janeiro it would be necessary to establish that Rio lies in Brazil. If the coordinates of Brasilia had been used for encryption, it would seem that the appliance should be able to look up the coordinates of Brasilia when given those of Rio. If they were not used, it would appear sufficient if the appliance could obtain the information that Rio lies in Brazil. In either case the precise geographical location of Rio de Janeiro appears irrelevant for decryption.

The board is therefore of the opinion that the description does not sufficiently disclose the generation of the relevant keys in such a way that their generation is not only based on the "area information" but also, as claimed, based on the location identity attribute.

*Reimbursement of the Appeal Fee*

8. Rule 103(1)a) EPC provides that the appeal fee shall be reimbursed where the board deems an appeal allowable, if such reimbursement is equitable by reason of a substantial procedural violation.
9. Since this appeal is not allowable already the precondition for reimbursement is not fulfilled.
10. Beyond that, the board would like to underline that it cannot find any indication that the examining division has committed a substantial procedural violation.
  - 10.1 The board agrees with the appellant that the precise disclosure of D2 may be open to debate, and whether or to what extent the disclosure of D2 can be appreciated on the basis of D2 alone or whether rather D2 can only be properly interpreted in view of D3.
  - 10.2 This however is matter of fact rather than one of procedure. Therefore, even if the board were to disagree with the inventive step objection in the decision, this would not constitute a procedural violation (see *inter alia* T 465/97, not published in OJ EPO, reasons 7.2.2.2).
  - 10.3 Apparently, the examining division did come to their conclusion "knowingly" and "deliberately". However they came to their conclusion after having discussed it with the applicant (see minutes of oral proceedings, points 3.3 and 3.4) and thus not in an arbitrary manner. Therefore the board does not find that the behaviour of

the examining division constitutes the breach of "good faith" alleged by the appellant.

10.4 The board concludes that the request to reimburse the appeal fee must be refused.

## **Order**

### **For these reasons it is decided that:**

1. The appeal is dismissed.
2. The reimbursement of the appeal fee is refused.

The Registrar:

The Chairman:

B. Atienza Vivancos

A. Teale