Datasheet for the decision of 12 August 2013

Case Number: T 1390/09 - 3.5.01
Application Number: 01923430.1
Publication Number: 1287441
IPC: G06F 17/00
Language of the proceedings: EN

Title of invention:
System and method for synchronizing data records between multiple databases

Applicant:
BlackBerry Limited

Opponent:
-

Headword:
Data synchronization/BlackBerry Limited

Relevant legal provisions:
-

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

Keyword:
"Inventive step - yes"
"Clarity of claims - no"
"Support by the description - no"

Decisions cited:
-

Catchword:
-
Case Number: T 1390/09 - 3.5.01

DECISION of the Technical Board of Appeal 3.5.01
of 12 August 2013

Appellant: BlackBerry Limited
(Applicant)
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Representative: MERH-IP
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 18 February 2009 refusing European patent application No. 01923430.1 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: W. Chandler
Members: R. R. K. Zimmermann
P. Schmitz
Summary of Facts and Submissions

I. Euro-PCT application number 01923430.1, publication number WO 01/77858, claims a priority date of 10 April 2000 for a system and method for synchronising data records between electronic databases.

II. In the European phase during the examination procedure, the applicant repeatedly amended the application, last in a response dated 7 January 2009 to a summons for oral proceedings issued together with a communication on 29 September 2008. In this response, the applicant filed a main request and an auxiliary request for amended claims, claim 1 of the main request reading as follows:

"1. A method of synchronizing data records (30) stored in a device database (14) and a host database (24A, 24B, 24C), wherein the device database (14) is coupled to a portable data communication device (12), the method comprising the steps of:

storing, at the host database (24A, 24B, 24C), a pair of synchronization parameters (34; 36) with each data record (30) stored in the host database (24A, 24B, 24C), the pair including a first synchronization parameter (34; 36) in form of a version number associated with the device database (14), and a second synchronization parameter (34; 36) in form of a version number associated with the host database (24A, 24B, 24C);

storing, at the device database (14), a pair of synchronization parameters (34; 36) with each data
record (30) stored in the device database (14), each pair including a first synchronization parameter (34; 36) in form of a version number associated with the device database (14), and a second synchronization parameter (34; 36) in form of a version number associated with the host database (24A, 24B, 24C);

updating a data record (30) at the device database (14);

incrementing the first synchronization parameter (34; 36) associated with the updated data record (30) at the device database (14);

transmitting the update message from the device database (14) to the host database (24A, 24B, 24C) via a wireless data network (16), the update message including the incremented first synchronization parameter (34; 36), the second synchronization parameter (34; 36), and the updated data record (30) from the device database (14);

receiving the update message at the host database (24A, 24B, 24C); and

updating the data record (30) at the host database (24A, 24B, 24C) using the information from the update message, subject to the second synchronization parameter of the device database (14) being equal to the second synchronization parameter of the host database (24A, 24B, 24C)."
III. In response to a further "brief communication" of 4 February 2009 wherein the examining division maintained the negative opinion on the requests, the applicant informed the examining division that they would not attend the oral proceedings, but rather requested a decision according to the state of the file.

IV. The examining division then refused the application at the oral proceedings held in the applicant's absence on 10 February 2009. In the grounds for the decision issued in writing with a date of 18 February 2009, the examining division invoked the reasons given in the previous communications of 29 September 2008 and 4 February 2009.

According to these two communications, the synchronisation method of claim 1 did not involve an inventive step over the closest prior art, the US patent number 5 806 074 published in 1998 (document D1). The claimed method was distinguished from said prior art only by the following features:

- Transmitting the update message via a wireless data network.
- Using version numbers for synchronisation purposes as first and second synchronisation parameters.

In their analysis of the prior art, the examining division equated a "change indicator" described at column 9 of document D1 and "old data values" cited in document D1 with the claimed "pair of synchronisation parameters" associated with each data record stored in the host database. They also considered, albeit in less detail, them to be implicitly disclosed for each data
record stored in the device database. The examining division expressly concurred with the applicant that the invention allegedly solved the objective technical problem of providing a low bandwidth synchronisation scheme for mobile clients. According to the examining division, however, using version numbers was only one of many obvious alternatives at the skilled person's disposal; choosing between such alternatives did not involve an inventive step.

V. The appellant (applicant) lodged an appeal against the refusal decision on 23 April 2009, requesting that the decision under the appeal be set aside and a patent be granted on the basis of the refused claims. Oral proceedings before the Board were requested in case that the Board intended to reject the appeal.

VI. According to the appellant, the examining division overlooked the fact that the claim in question stipulated the maintenance of a pair of synchronisation parameters with each data record in form of a version number, which meant that two numbers were added to each data record stored at the receiving site and to each data record stored at the originating site. The examining division did not provide any prior art which suggested a synchronisation concept involving pairs of synchronisation parameters in form of version numbers.

Reasons for the Decision

1. The admissible appeal is allowable since, in the Board's judgement the findings and reasoning in the decision under appeal do not justify a negative
judgement on the patentability of the claimed invention. In particular, the analysis of prior art document D1 does not take full account of the invention as claimed.

1.1 It is common ground that the claimed data construct, namely a data record and an associated pair of synchronisation parameters, is an essential feature of the present invention which results in reduced bandwidth requirements for the synchronisation process in a mobile communications network. This objective technical problem relies on the meaning of the various "synchronisation parameters", which is, however, not clearly defined in the claims and hence needs to be determined in the light of the whole application.

1.2 According to claim 1, synchronisation parameters are version numbers "associated with the host [or device] database". Claim 1 defines storing a pair of synchronisation parameters associated with each data record at both the host and device databases. Each pair has a first and second synchronisation parameter in the form of a version number associated with the device and host database, respectively.

The claim specifies that the first synchronisation parameter is incremented when the associated data record is updated at the device. Hence, this first synchronisation parameter indicates the current version of the associated data record stored in the device database.

There is no analogous definition in the claim concerning the second synchronisation parameter. However, it can be derived from the description and the
drawings that the version number provided by the second synchronisation parameter relates to the version of the data record stored at the host database. The second synchronisation parameter stored at the host database indicates the current version of the associated data record stored at the host database and is incremented as well at each update of the data record at the host.

1.3 The examining division equated the first synchronisation parameter with the prior art "change indicators" (see the communication of 29 September 2008 at page 2). These indicators, however, are only used to identify the column groups which have been changed (cf. D1, column 9, lines 28 to 58). They are not associated with each record. More importantly, as recognised by the examining division, they do not indicate the version of the changed records and, as far as disclosed, also do not implicitly encode any such information. The change indicators are thus not synchronisation parameters in terms of the present invention.

Furthermore, the examining division identified the second synchronisation parameters as the "old value" from the originating site and apparently with the "current value" at the receiving site as shown and described in the context of Figures 3 to 5 of document D1. Although the comparison of the old and current data values might be a possibility of conflict detection as set out in D1, the prior art method carries out the comparison only on the basis of updated values (cf. D1, column 9, lines 39 to 42 and lines 55 to 58). There may be situations were updates have occurred, but the values remain the same. For example, if an update is not forwarded from the originating site and the value
at the receiving site happens to have changed to the untransmitted old value. Such kinds of ambiguity are avoided in comparing the corresponding version numbers of the data record to be updated. This shows that the two methods not only apply different concepts of replication control, but also produce different outcomes.

1.4 Even if the use of a version number to keep track of changes to data is well known per se, the specific use of the pair of versions numbers in the device and the host as in this invention, cannot in the Board's view be considered as a straightforward possibility as decided by the examining division. The difference over the prior art of document D1 is material so that its negative assessment requires clear documented evidence disclosing or suggesting the use of pairs of synchronisation parameters as an obvious alternative at the disposal of the skilled person. The examining division failed to provide any such evidence.

1.5 The Board has examined whether the "audit information" and "timestamps" referred to in document D1 might better meet the parameter definitions of the present invention. Although some congruence exists, there is no clear disclosure that any of these parameters are stored pairwise at the originating site as well as at the receiving site for providing an indication of the update version at each and for each site. Other prior art documents cited in the international search report have apparently not been found relevant by the examining division either. The Board does not see any good reason to deviate from this finding.
1.6 Under these circumstances the decision under appeal must be reversed.

2. It follows from the above considerations, however, that the claims do not meet the requirements of Article 84 EPC. In addition to the incomplete definition of the synchronisation parameters, the Board finds the following further deficiencies in the claims:

2.1 Claim 1, line 23 f. is not consistent with the definition of the first synchronisation parameter given in the second paragraph of claim 1.

2.2 Claim 1, line 25 refers to "the update message" that has not been defined previously in the claim.

2.3 The definitions of the invention in the independent claims 1 to 11 are not consistent and should be adapted to avoid ambiguities regarding the scope of the claims.

2.4 The technical problem to be solved by the invention is indicated in the description in the paragraph bridging pages 2 and 3 (see also the appellant's letter setting out the grounds of appeal at page 3, second paragraph). The solution requires a "master-slave configuration between the databases [enabling] either database to resolve conflicts without further communications" as stated at page 3, lines 17 ff. of the description. The present definitions in independent claims 1 and 11 do not define any such master-slave configuration. Hence, essential features of the invention are missing in the independent claims so that the claims are not supported by the description.
2.5 Finally, the description needs adaptation to the invention as claimed.

3. Since the deficiencies indicated above have not been addressed in the procedure so far, the Board considers that this can best be done by the department of first instance. The case is, therefore, remitted to the examining division for further prosecution. Since the appeal is allowed, it is not necessary to hold oral proceedings.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the examining division for further prosecution.

The Registrar: The Chairman:

T. Buschek W. Chandler