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Datasheet for the decision of 21 June 2018

Case Number: T 1655/13 – 3.5.07
Application Number: 02777607.9
Publication Number: 1586013
IPC: G06F17/30
Language of the proceedings: EN

Title of invention:
Data management

Applicant:
Loureiro, Jorge Diniz Queiroga

Headword:
Data management/LOUREIRO

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

Keyword:
Claims – clarity (no) – support in the description (no)
Amendments – added subject-matter (yes)
Case Number: T 1655/13 - 3.5.07

DE C I S I O N
of Technical Board of Appeal 3.5.07
of 21 June 2018

Appellant: Loureiro, Jorge Diniz Queiroga
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 8 January 2013 refusing European patent application No. 02777607.9 pursuant to Article 97(2) EPC

Composition of the Board:
Chairman R. Moufang
Members: P. San-Bento Furtado
M. Jaedicke
Summary of Facts and Submissions

I. The appeal lies from the decision of the Examining Division to refuse European patent application No. 02777607.9. It was filed on 17 October 2002 as international application PCT/IB02/04273, which has the publication number WO 03/034173 A2. While the applicant had originally claimed the priority of the South African application ZA 2001/8533 of 17 October 2001, he withdrew the priority claim in the international phase (see the International Bureau's notification of withdrawal of 19 April 2004).

II. The decision under appeal refused the application on the grounds of lack of novelty of the independent claims of the main request and lack of inventive step of the subject-matter of claim 1 of the first and second auxiliary requests - all three requests having been filed during the oral proceedings - over the following prior-art document:

The Examining Division was further of the opinion that some features of the invention lacked technical character. The subject-matter of dependent claims 2, 7 to 9 and 15 of the main request was not new, and that of the remaining claims 3 to 6 and 10 to 13 not inventive over document D1 alone or in combination with the following document:

As an additional comment, the Examining Division expressed the opinion that the claims were drafted in such vague and general terms that any web server which allowed users to create websites using website templates, the technical means of which were well
known, would disclose the main technical aspects of the invention.

III. In the statement of grounds of appeal, the appellant requested that the decision be set aside and that a patent be granted on the basis of the main request or of either the first or second auxiliary request, all three requests as considered in the appealed decision, or on the basis of one of the third to tenth auxiliary requests submitted with the grounds of appeal (the first to tenth auxiliary requests being hereinafter also referred to as auxiliary requests 1 to 10).

IV. In a communication accompanying a summons to oral proceedings, the Board tended to agree with the Examining Division that the claims contained some non-technical features and defined the subject-matter in technically vague terms. It informed the appellant that, at the oral proceedings, it would have to be discussed how to interpret the claims and whether there was support for some of the claimed features in the description or in the application as originally filed. The discussion of those questions was especially relevant with regard to features on which the appellant had based its reasoning in favour of inventive step. The Board then discussed the interpretation of features of claim 1 of the main request, taking into account the submissions by the appellant. The Board expressed its preliminary opinion that claim 1 of the main request did not fulfil the requirements of Articles 84 and 123(2) EPC.

As regards novelty over document D1, the Board noted that, due to the withdrawal of the priority claim, D1 seemed to constitute state of the art with regard to the European application. The Board could not identify
any technical difference between the feature alleged to be distinguishing by the appellant and the creation of a hyperlink as known from the prior art and from document D1. The Board was not convinced that there was a basis in the application for the appellant's interpretation of this feature.

The Board was of the preliminary opinion that the subject-matter of claim 1 was not inventive over the Microsoft Internet Explorer (IE) suite of programs, taking into account the features of that product which were well known before the application under consideration, and as was described in documents introduced by the Board. The distinguishing features seemed to merely reflect the organisation of the database's informational content on the basis of non-technical criteria and lacked inventive step.

At least some of the preliminary objections to claim 1 of the main request under Articles 84 and 123(2) EPC applied to claim 1 of each of the auxiliary requests. Some of the additional features in those claims were unclear. The additional features of claim 1 of the auxiliary requests lacked technical character, were obvious and/or known from the prior art and did not involve an inventive step.

V. In a letter of reply the appellant informed the Board that he would not attend the oral proceedings and would not make any further submissions.

VI. The oral proceedings were held on 21 June 2018 in the absence of the appellant. At the end of them, the chairman pronounced the Board's decision.
VII. The appellant had requested in writing that the contested decision be set aside and that a patent be granted on the basis of the main request or of either the first or second auxiliary request, all three requests as considered in the appealed decision, or on the basis of one of the third to tenth auxiliary requests submitted with the grounds of appeal.

VIII. Claim 1 of the main request reads as follows:
"A computer program product for managing information relating to a particular topic, the computer program product including program instructions:

   for compiling a database in which the information is stored, the database including a first portion (10) subdivided into first sub-portions (12) and a second portion (10) subdivided into second sub-portions (12), wherein the information is stored in the first and second sub-portions,

   for linking the first sub-portions (12) of the first portion (10) of the database, to one another in a predetermined linear sequential arrangement such that navigation from a first sub-portion to another succeeding or preceding first sub-portion with the sequence is permitted and wherein each subsequent sub-portion (12) in the sequential arrangement contains increasing information on the topic,

   for linking the second sub-portions (12) of the second portion (10) of the database, to one another in a predetermined linear sequential arrangement such that navigation from a second sub-portion to another succeeding or preceding second sub-portion with the sequence is permitted and wherein each subsequent sub-portion (12) in the sequential arrangement contains increasing information on the topic,

   for defining primary key expressions by a compiler in the information contained in selected sub-portions
of at least one of the first sub-portions (12) and the
second sub-portions (12),

for creating user-executable links between each
primary key expression and another sub-portion (12) of
the database thereby permitting a user to jump from the
primary key expression to said another sub-portion (12)
by clicking on the primary key expression, and

for recording an address for said one sub-portion
(12) in the database from which a the [sic] user-
executable navigation link is made to said another sub-
portion (12), in order to allow a user to return to
said said one sub-portion."

IX. Claim 1 of the first auxiliary request differs from
that of the main request in that, apart from the
deletion of the last word of its penultimate paragraph
("and"), the following text has been added at the end
of the claim:

"the database includes explanatory notes and wherein
selected sub-portions (12) include secondary key
expressions which are embedded in the information
contained in said selected sub-portions (12), and
the computer program product including program
instructions for linking each secondary key expression
to a particular explanatory note."

X. Claim 1 of the second auxiliary request differs from
that of the main request in that, apart from the
deletion of the last word of its penultimate paragraph
("and"), the following text has been added at the end
of the claim:

"for displaying on a display device, title
information representing each sub-portion (12) from
which a link is made via said primary key expressions,
so as to provide a user with a record of a conversation
path formed by sub-portions (12) of the database which are linked via said primary key expressions, and for recording and displaying said title information in an order representing the sequence in which the sub-portions (12) were accessed by a user."

XI. Claim 1 of the third auxiliary request differs from that of the second auxiliary request in that the following text has been added at the end of the claim:
"for compiling the databases such that the database includes explanatory notes and such that selected sub-portions (12) include secondary key expressions which are embedded in the information contained in said selected sub-portions (12), and for linking each secondary key expression to a particular explanatory note."

XII. Claim 1 of the fourth auxiliary request differs from that of the third auxiliary request in that the following text has been inserted before "for compiling the databases":
"for linking each primary key expression to another sub-portion (12) of the database which contains increasing information relating to the subject matter of the primary key expression,".

Furthermore, the following text has been added at the end:
"for compiling the databases such that the explanatory notes of the database have primary key expressions embedded therein, and for linking each primary key expression to a predetermined sub-portion (12) of the database."
XIII. Claim 1 of the fifth auxiliary request differs from that of the fourth auxiliary request in that the following text has been added at the end of the claim:
   "for compiling the databases such that the explanatory notes of the database have secondary key expressions embedded therein, and
   for linking each secondary key expression to another explanatory note."

XIV. Claim 1 of the sixth auxiliary request differs from that of the fifth auxiliary request in that the following text has been added at the end of the claim:
   "for compiling the databases such that the database includes default explanatory notes which each contain information in the form of an overview of the information contained in a particular sub-portion (12) of the database, and
   for displaying the default explanatory note simultaneously with the relevant sub-portion (12) on a display device."

XV. Claim 1 of the seventh auxiliary request differs from that of the sixth auxiliary request in that the following text has been added at the end of the claim:
   "for compiling the databases such that portions (10) of the database are arranged in sets which are sequentially arranged, and
   for linking pre-selected sub-portions (12) of a particular portion of one set (14) to the first sub-portion (12) of at least one portion (10) of succeeding set."

XVI. Claim 1 of the eighth auxiliary request differs from that of the seventh auxiliary request in that the following text has been added at the end of the claim:
"for linking the portions (10) and sub-portions (12) of the database by means of hypertext links, and for recording the address in the database of each sub-portion (12) of the database from which a link using a primary key expression is achieved."

XVII. Claim 1 of the ninth auxiliary request differs from that of the second auxiliary request in that the following text has been added at the end of the claim:
"including a feedback component including program instructions permitting any part of the information contained in a sub-portion (12) or explanatory note of the database, to be selected by a user and for the user's selection to be recorded."

XVIII. Claim 1 of the tenth auxiliary request differs from that of the ninth auxiliary request in that the following text has been added at the end of the claim:
"including a monitoring component which includes program instructions for recording users' selections of primary and secondary key expressions."

XIX. In the grounds of appeal the appellant argued with respect to the main request that document D1 did not disclose the step in claim 1 of "defining primary key expressions by a compiler in the information contained in selected sub-portions of at least one of the first sub-portions and the second sub-portions". Document D1 disclosed that the user created links; that a user was able to "link", or "bookmark", a web page. By contrast, the invention provided a completely different and opposite teaching. The appellant argued that, according to the aforementioned step, "not a user and instead a compiler automatically creates the so called primary key expressions" and the primary key expressions were created in the information contained in selected sub-
portions only. Document D1 did not provide any hints or suggestions to automatically create links for (only) selected content of a web page to be embedded in the web page. As this conclusion applied to the other prior art as well, it had to be concluded that the claims of the main request were not only new but also inventive over the prior art.

**Reasons for the Decision**

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

**The invention**

2. The invention concerns a database, referred to in the application as the "forumBook", which contains information relating to a particular topic. The database includes portions which are each subdivided into a number of sub-portions, also referred to as "pages". The portions are further arranged into a number of sets, also called "levels" (see page 9, lines 8 to 12, of the international A2 publication). The portions and sub-portions may be linked, e.g. by means of hypertext links (page 9, lines 14 to 19; page 5, first full paragraph).

2.1 A primary key expression is embedded in the information contained in a sub-portion and is linked to another sub-portion of the database which contains further information relating to the subject-matter of the primary key expression (page 10, lines 8 to 22). The database may also include explanatory notes linked by secondary key expressions (page 2, second and third paragraphs; page 11, lines 17 to 35; Figure 3C). Portions of the database are arranged in sets, which
are sequentially arranged. A tertiary key expression links (by a "default link") a sub-portion in one set and a sub-portion in the succeeding set (page 13, line 33, to page 14, line 17).

2.2 According to page 9, lines 23 to 26, the numbers of sets, portions and sub-portions forming the forumBook are "determined by the compiler of the database" and "depend on the nature, scope and amount of subject-matter to be covered in the database". The sub-portions of each portion are linked to one another in a sequential arrangement wherein each subsequent sub-portion in the sequential arrangement contains further information on the topic. The sequences of sub-portions are intended to "allow a linear and seamless progression of understanding of the topic similar to the progression when people have a conversation about the topic" (page 9, line 31, to page 10, line 2).

2.3 The claims as originally filed were directed to a database of information, to a computer program product for managing the content of a database, to an information management product and to a method of compiling a database.

**Main request**

3. Claim 1 recites a computer program product for managing information relating to a particular topic, the computer program product including program instructions for performing the steps mentioned in the claim. The steps are essentially the following (step (b) corresponding to two equivalent steps in the claim):
   (a) compiling a database including first and second portions, each subdivided into sub-portions,
(a.1) the database and sub-portions storing information,
(b) linking sub-portions of each of the first and second portions in a predetermined linear sequential arrangement
(b.1) such that navigation from a sub-portion to another succeeding or preceding sub-portion within the sequence is permitted and
(b.2) wherein each subsequent sub-portion in the sequential arrangement contains more information on the topic,
(c) defining primary key expressions by a compiler in the information contained in selected sub-portions of at least one of the first and second sub-portions,
(d) creating user-executable links between each primary key expression and another sub-portion,
(d.1) thereby permitting a user to jump from the primary key expression to another sub-portion by clicking on the primary key expression, and
(e) recording an address for said sub-portion in the database from which the user-executable navigation link is made to said another sub-portion,
(e.1) in order to allow a user to return to said one sub-portion.

4. Clarity/support in the description (Article 84 EPC) and added subject-matter (Article 123(2) EPC) – claim 1

4.1 As the Board explained in its preliminary opinion, steps (a) to (d) of claim 1 of the main request refer to a phase in which the database is set up, while step (e) is a step performed by the computer program in a later phase as a reaction to a user following a link.
The specific wording "the computer program product including program instructions for [performing each of the steps (a) to (e)]" raises the question of whether the claim should be understood as covering a computer program product including program instructions for performing all the steps automatically. This is of particular importance for the steps of compiling a database (= step (a)) and defining primary key expressions by a compiler (= step (c)).

4.2 Indeed, one point of discussion in the proceedings, both before the department of first instance and on appeal, was whether the term "compiler" in step (c) had to be understood as a person or as computer-program means for automatically defining primary key expressions.

The appellant's submissions on this point have not been very consistent. In the letter of 19 October 2012 (page 5), he stated that the computer program included "program instructions to enable a compiler (author) to define primary key expressions in the information which is stored in selected sub-portions of the database". In a similar vein, he maintained at the oral proceedings before the department of first instance that the term "compiler" could refer to a human being (see minutes, page 1, point 3). That was also how the Examining Division interpreted the claim.

However, in the grounds of appeal the appellant submitted that, according to feature (c) of claim 1, "not a user and instead a compiler automatically creates the so called primary key expressions". When arguing in favour of inventive step, he heavily relied on this interpretation for distinguishing the claimed invention from the teaching of document D1 (see
section XIX above). Since these submissions imply that the term "compiler" should be interpreted as specifying computer-program means, the appellant is contradicting his own previous statements, thereby causing serious concerns about the clarity of the feature.

4.3 The wording of claim 1, in particular the expression "program instructions for", suggests that the claimed steps are performed automatically by computer means. Furthermore, the term "compiler" is commonly used in computer science to designate a computer program to automatically process code. It would therefore be inappropriate to interpret the claim as implicitly ruling out the compilation of the database in step (a) and the definition of primary key expressions in step (c) being both performed automatically. While it could be argued that the claim language is broad enough to also encompass embodiments where some human activity is involved, it cannot be understood as being limited to such kinds of embodiment.

4.4 On the other hand, the description - as the following detailed analysis will show - discloses merely that steps (a) and (c) above are performed essentially by a person. It does not disclose that they can be performed automatically without the active participation of a human being.

4.4.1 Numerous passages in the description refer to a "compiler of the database", i.e. not to a compiler without any further qualification (see page 9, lines 23 to 24 and lines 31 to 32; page 11, lines 13 to 15; page 12, lines 24 to 29; page 13, lines 8 to 11; and page 15, lines 22 to 24). According to page 9, lines 31 to 32, "the sets, the portions and the sub-portions of the database are compiled by or in collaboration with
the compiler of the database". The passage on page 12, lines 24 to 29, describes that the primary key expressions are established by the compiler of the database. None of these passages describes a computer program for automatically compiling the database or a compiler of the database as part of a computer program for automatically compiling the database and defining primary key expressions.

4.4.2 Moreover, page 15, lines 22 to 24, reads as follows:

"The Applicant envisages that in a wide application, monitoring components may be operable to monitor the use of any part of the forumBook by any participant, i.e. by a user or a compiler of the database."

It is clear from this passage that a "participant" is not part of a computer program, but a person, and that the "compiler of the database" is a "participating person".

4.4.3 Page 13, lines 8 to 11, of the description reads as follows:

"The invention extends to a computer program product for managing the content of the forumBook, which includes program instructions for linking the sub-portions of each portion of the database to one another in a predetermined sequential arrangement as determined by the compiler of the database. The computer program product also includes program instructions for linking [...]"

In the Board's opinion, it is clear from this text in combination with the passages cited above that the automatic processing starts from a sequential arrangement predetermined by the compiler of the database, the compiler of the database being a person
who compiles the database. Similarly, the compiler of the database who establishes primary key expressions (page 12, lines 24 to 29) may only reasonably be understood as being a person.

4.4.4 A step of "defining primary key expressions in the information contained in selected sub-portions of the database" is disclosed in the description in the context of "a method of compiling a database of information relating to a particular topic" (page 7, penultimate paragraph, to page 8, second line). However, that passage does not mention a compiler (as computer means) or that such a compiler defines the primary key expressions. It does not disclose at all that either the step of compiling a database or the step of defining primary key expressions may be performed automatically by computer-program means.

5. Nor do the originally filed claims contain any disclosure which would support a different understanding of the teaching of the invention.

5.1 A step of defining primary key expressions is defined in original claim 24. However, that claim is directed to a "method of compiling a database of information relating to a particular topic" and does not mention a compiler, program instructions or any computer program including program instructions. In the Board's view, the skilled reader would interpret that original claim, especially in the light of the description, as defining a method performed by a person compiling a database. Thus, from original claim 24 it cannot be derived that, according to the teaching of the invention, computer-program means automatically compile the database or define the primary key expressions.
5.2 Original claim 9, which is dependent upon original claim 8, defines a computer program product including "program instructions for linking each primary key expression to another sub-portion of the database". However, it does not recite a step of defining primary key expressions and does not refer to a compiler. Furthermore, original claims 8 and 9 essentially define a "computer program product for managing the content of a database of information" wherein the database includes portions, sub-portions and primary key expressions, "the computer program product including program instructions for linking [...]". According to these claims, the program instructions of the program product are thus not used for setting up the portions, sub-portions and primary key expressions of the database, but are used only in a second phase in a database with previously defined portions, sub-portions and primary key expressions.

6. In the light of the above analysis, the Board comes to the following conclusions:

- Claim 1 is broader than justified by the description as there is no support in the description for a "compiler" as program means for automatically defining primary key expressions, or for "program instructions" for automatically performing steps (a) and (c). Hence, it does not comply with Article 84, second sentence, EPC because it lacks support.

- Furthermore, the lack of support in the description for a "compiler" (without the qualification "of a database") and the inconsistency between the "compiler" as specified in the claim and the "compiler of the database" defined as a person in
the description renders the claimed feature "compiler" unclear. Consequently, claim 1 does not comply with Article 84, second sentence, EPC because it lacks clarity.

- Features (a) and (c) of claim 1 cannot be directly and unambiguously derived from the application as originally filed. Thus, the claim infringes Article 123(2) EPC.

**Auxiliary requests 1 to 10**

7. *Clarity and added subject-matter - claim 1*

7.1 Claim 1 of each of auxiliary requests 1 to 10 includes all the features of claim 1 of the main request, including steps (a) and (c) discussed above with regard to the main request.

As a consequence, the reasoning given above for claim 1 of the main request with respect to lack of clarity and of support and to added subject-matter also applies to claim 1 of each of auxiliary requests 1 to 10.

7.2 The Board therefore concludes that auxiliary requests 1 to 10 do not fulfil the requirements of Articles 84 and 123(2) EPC.

**Final remarks**

8. In its communication under Article 15(1) RPBA, the Board stated that the compiler mentioned in step (c) and in the description had to be understood as a user (point 7.4 of the communication) and that there was no basis in the application for interpreting feature (c) as referring to fully automatic creation of primary key
expressions (point 8.2). Even though, at first sight, this could seem to differ from the Board's interpretation of the claim under point 4.3 above, it was clear from the communication that different claim interpretations were possible and could result from the deliberations at the oral proceedings. In particular, in the same communication, the Board announced that, at the oral proceedings, it might have to be discussed how steps (a) to (d) were to be interpreted (point 7.3) and whether the claims satisfied the requirements of clarity and support in the description and in the application as originally filed (points 7.3 to 7.5). In addition, the Board was of the opinion that the claim covered a computer program product including program instructions for performing steps (a) to (e) automatically, but that there was no basis in the application as originally filed for these automatic steps (points 7.4 and 8.2). The Board also raised preliminary objections under Articles 84 and 123(2) EPC.

The appellant therefore had to expect that claim interpretation and compliance with Articles 84 and 123(2) EPC would be discussed and decided upon at the oral proceedings. For that reason, the Board was, despite the absence of the duly summoned appellant, in a position to take a final decision on these points at the oral proceedings, without violating the appellant's right to be heard. The appellant had an opportunity, in accordance with Article 113(1) EPC, to comment on these issues in writing and during the oral proceedings, which it chose not to attend.

9. Since none of the requests on file is allowable, the appeal is to be dismissed. Thus, there is no need to consider any of the further objections raised in the
contested decision or by the Board in its preliminary opinion.

**Order**

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

The appeal is dismissed.

The Registrar: The Chairman:

I. Aperribay R. Moufang

Decision electronically authenticated