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Datasheet for the decision of 6 September 2016

Case Number: T 0921/11 - 3.4.01

Application Number: 05102341.4

Publication Number: 1594079

IPC: G06K17/00

Language of the proceedings: EN

Title of invention:
Generation of meaningful names in flattened hierarchical structures

Applicant:
Microsoft Technology Licensing, LLC

Headword:

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

Keyword:
Claims - clarity (no)
Amendments - added subject-matter (yes)

Decisions cited:

Catchword:

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Case Number: T 0921/11 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 6 September 2016

Appellant: (Applicant)	Microsoft Technology Licensing, LLC One Microsoft Way Redmond, WA 98052 (US)
Representative:	Grünecker Patent- und Rechtsanwälte PartG mbB Leopoldstraße 4 80802 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 24 November 2010 refusing European patent application No. 05102341.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	G. Assi
Members:	P. Fontenay
	J. Geschwind

Summary of Facts and Submissions

I. The appeal, filed on 4 February 2011, lies from the decision of the examining division dispatched on 24 November 2010 refusing the application for the reason of lack of an inventive step (Articles 52(1) and 56 EPC 1973) of the subject-matter of the claims of a main request and three auxiliary requests then on file.
The appeal fee was paid on 4 February 2011.
The statement setting out the grounds of appeal was filed on 29 March 2011.

II. With the grounds of appeal, the appellant requested as a main request that the decision under appeal be set aside and that a patent be granted on the basis of a set of claims according to the main request underlying the decision under appeal, i.e. the main request filed on 15 October 2010.

Alternatively, the appellant requested that a patent be granted on the basis of a set of claims according to auxiliary request I, as filed with the grounds of appeal, or one of auxiliary requests II, III and IV, corresponding to auxiliary requests I, II and III underlying the decision in suit.

As an auxiliary request, the appellant requested oral proceedings.

III. A summons to attend oral proceedings was issued on 15 April 2016. The oral proceedings were due to take place on 6 September 2016.

IV. By letter of 26 April 2016, the appellant's representative stated that it would not be attending the oral proceedings. The appellant withdrew the

request for oral proceedings and requested a decision according to the state of the application.

V. With a communication of 14 June 2016, the Board informed the appellant about its provisional opinion with regard to the requests on file (Articles 113(1) EPC, 17 RPBA).

In particular, the attention of the appellant was drawn to various clarity issues under Article 84 EPC 1973 with regard to all requests on file. The objections raised by the Board related, essentially, to the unclear or inconsistent terminology used in the claims. In addition, issues regarding basis for amendments relating to the amendments carried out with regard to auxiliary requests II and IV were also addressed.

The appellant did not file any reply.

VI. Oral proceedings were maintained and took place on 6 September 2016, as scheduled, in the absence of the appellant.

VII. Claim 1 of the main request reads:
"*A system for the generation of a description for a flattened data structure which is a tabular listing, comprising:*
a data structure (102) having a plurality of data nodes (104-108), wherein the data structure (102) is hierarchical;
characterized by
a valuation component (112) that assigns a valuation to one or more of the data nodes (104-108) in accordance with a predetermined metric wherein the predetermined metric is one of a plurality of metrics that are used for determining the valuation, which plurality of

metrics include time created, that the node (108) was accessed, time the node (108) was accessed, that the node (108) was modified, when the node (108) was modified, that the node (108) was copied, an access frequency, and a number of unique users who have accessed the node (108); and
a description component (116) that generates a description that represents at least one of the one or more data nodes (104-108) that is selected according to the metric."

Claims 2 to 10 of the main request depend on claim 1.

Claim 11 of the main request reads:
"*A computer readable medium having stored thereon computer executable instructions for carrying out the system of claim 1.*"

Claim 12 of the main request reads:
"*A computer that employs the system of claim 1.*"

Claim 13 of the main request reads:
"*A method for generating names of a data structure, the method comprising:*
receiving a data structure (102) having a plurality of nodes (104-108);
processing observed user activity associated with the plurality of nodes (104-108);
characterized by
assigning a valuation to each of the plurality of nodes (104-108) in accordance with a predetermined metric, wherein the predetermined metric is one of a plurality of metrics that are used for determining the valuation, which plurality of metrics include time created, that the node (108) was accessed, time the node (108) was accessed, that the node (108) was modified, when the

node (108) was modified, that the node (108) was copied, an access frequency, and a number of unique users who have accessed the node (108);
selecting one or more of the plurality of nodes (104-108) that is associated with a predetermined valuation limit;
extracting node metadata that is associated with the one or more selected nodes (104108); and
generating a name for each of the one or more selected nodes (104-108) based on the respective node metadata."

Claims 14 to 22 of the main request depend on independent claim 13.

Claim 23 of the main request reads:
"*A computer-readable medium having computer-executable instructions for performing the method steps of claims 13 to 22.*"

VIII. Auxiliary request I consists of claims 1 to 11. Claims 1 to 10 are identical to claims 13 to 22 of the main request and claim 11 corresponds to claim 23 of the main request.

IX. Claim 1 of auxiliary request II differs from claim 1 according to the main request in that the feature relating to the description component has been completed to read:
"*a description component (116) that generates a description that represents at least one of the one or more data nodes (104-108) that is selected according to the metric, wherein a flattened data structure with different descriptions for different users from the same data structure is generated*".

Claim 13 of auxiliary request II differs from claim 13 of the main requet in that the claim has been further specified so as to recite:
"*further comprising generating a first set of names for a first user and a second set of names for a second user, wherein the first and second sets of names are generated from the same data structure (102)*".

The wording of claims 11 and 12 of auxiliary request II is identical to the wording of the corresponding claims of the main request.

Claim 22 of auxiliary request II reads:
"*A computer-readable medium having computer-executable instructions for performing the method steps of claims 13 to 22 [sic]*".

X. Claim 1 of auxiliary request III differs from claim 1 according to the main request in that the feature relating to the description component has been amended so as to read:
"*a description component (116) that generates and outputs a description that represents at least one of the one or more data nodes (104-108) that is selected according to the metric, wherein the output description can be used to navigate to the associated data node (108) by hyperlinking the description to the corresponding data node (108)*".

Claim 12 of auxiliary request III differs from claim 13 of the main request in that the claim has been amended by reciting, as last feature of the claim:
"*outputting the one or more names as a one-dimensional view and hyperlinking each or any of the names for navigation*".

The wording of claims 10 and 11 of auxiliary request III is identical to the wording of the corresponding claims 11 and 12 of the main request.

Claim 21 of auxiliary request III reads:
"*A computer-readable medium having computer-executable instructions for performing the method steps of claims 12 to 20*".

XI. Claim 1 of auxiliary request IV differs from claim 1 according to auxiliary request II in that it has been specified that the valuation is presented as a number and in that the description component has been further specified.

Claim 12 of auxiliary request IV differs from claim 13 of auxiliary request II in that the claim recites that the valuation is presented as a number, that the node metadata is node identifier data and that the step of generating a name for each of the one or more selected nodes has been further specified.

The wording of claims 10 and 11 of auxiliary request IV is identical to the wording of the corresponding claims 11 and 12 of the main request.

Claim 18 of auxiliary request IV reads:
"*A computer-readable medium having computer-executable instructions for performing the method steps of claims 12 to 18 [sic]*".

Reasons for the Decision

1. The appeal meets the requirements of Articles 106 to 108 EPC and Rule 99 EPC. It is thus admissible.

2. In the absence of any appellant's arguments against the Board's objections, as mentioned in the communication of 14 June 2016, and after due reconsideration of the case in preparation for the oral proceedings, the Board has no reasons to diverge from its previous opinion.

3. Main request - Article 84 EPC 1973

3.1 The claims are not clear as a whole.

Independent claim 11 refers to a "*computer readable medium having stored thereon computer executable instructions for carrying out the system of claim 1*". The selected wording is confusing in that it suggests that the system "*for the generation of a description for a flattened data structure*" of claim 1 could possibly relate to a process.

No clear indication can be derived from the description as to the actual meaning associated to the term "*system*". In the contrary, the statement in paragraph [0012] of the application as published adds to the confusion since it specifies "*As used in this application, the terms "component" and "system" are intended to refer to a computer-related entity, either hardware, a combination of hardware and software, software, or software in execution. For example, a component can be, but is not limited to being, a process running on a processor, a processor, an object, an executable, a thread of execution, a program, and/or a computer. By way of illustration, both an application running on a server and the server can be a component. One or more components can reside within a process and/or thread of execution, and a component can be localized on one computer and/or distributed between two or more computer.*"

Should the term "*system*" in claim 1 indeed be equated with a process, claim 11 would then be redundant with claim 23.

On the other hand, should the term "*system*" in claim 1 be equated with the term "*software*", as suggested in paragraph [0012] of the published description, the requirements of article 52(2)(c) EPC would not be met. In this case, the Board fails, namely, to identify any technical contribution in the mere evocation of the functions to be performed by the "*system*" of claim 1. A consequence of this finding would then be that claim 1 defines a computer program "*as such*", excluded from patentability under Article 52(3) EPC.

It is therefore considered that the claims as a whole, construed in the light of the description, are so unclear as to the meaning of the term "*system*" that the skilled reader is neither in a position to recognize the nature of the claimed subject-matter nor the category to which claim 1 belongs. This finding reflects itself in all the claims which refer, by way of dependency or mere reference, to claim 1.

3.2 The terms of the claims are so vague that the claims definitions become virtually incomprehensible.

The expressions "*description for a flattened data structure*" in claim 1 and "*names of a data structure*" in claim 13 are obscure, so that it is not clear what exactly the claimed system and method would generate, respectively.

Moreover, it is unclear from claim 1 what "*data nodes*" (claim 1, lines 3-4) of a "*data structure*" would

be when the latter is in the form of a "*tabular listing*" (claim 1, lines 1-2). The appellant appears to suggest (page 8, first paragraph of the grounds of appeal) that claim 1 should be understood as referring to two separate "*data structures*", a "*flattened*" one in the form of a "*tabular listing*" being a transformation from another "*data structure*" which is "*hierarchical*". However, such an interpretation further increases confusion since the claim wording would imply that the two data structures coexist in parallel.

Likewise, the terms "*valuation component*" (claim 1) and "*valuation*" (claims 1 and 13) have no clear meaning. In particular, it is unclear which purpose a "*valuation*" would serve and how it is related to a "*description*" (claims 1, 6, 9 and 15), a "*name*" and "*node metadata*" (claim 13).

3.2.1 The definition in claim 1 "*that assigns a valuation to one or more of the data nodes (104-108) in accordance with a predetermined metric wherein the predetermined metric is one of a plurality of metrics that are used for determining the valuation*" and a corresponding definition in claim 13 are circular definitions and thus practically meaningless.

3.2.2 It is not clear from claims 1 and 13 what exactly is meant by the term *"metric*" and how, by which element of the claimed system and according to which criterion such a "*metric*" would be "*predetermined*".

Unclarity arises in particular from some of the options listed in claims 6 or 15 in combination with several of the metrics listed in claim 1 or 13, respectively. For instance, it is difficult to imagine what a "*valuation*" in the form of "*image data*" (claims 6 and 15) or a

"*coloration*" (claim 6) would mean for a "*metric*" of the type "*time created*" or "*time the node was accessed*".

3.2.3 Claim 1 is contradictory in itself in that the claimed system is specified to serve "*for the generation of a description for a flattened data structure*", whereas a "*description component*" "*generates a description that represents at least one of the one or more data nodes*" (emphasis added).

The complement "*that is selected according to the metric*" is not understood in the context of said flattened data structure.

3.2.4 The nature and role of the "*predetermined valuation limit*" for "*selecting one or more of the plurality of nodes*" in independent claim 13 are obscure.

Likewise, it is not clear from where "*node metadata*" would be retrieved and how exactly retrieval of a name for a node "*based on the respective node metadata*" could be accomplished.

3.2.5 The expression "*processed for viewing*" and the term "*one-dimensional view*" given in claim 2, respectively, claims 3 and 14, in the context of a selection of data nodes have no readily recognizable meaning.

The additional features according to claim 10 are enigmatic because, in the given context, the terms "*facilitates*", "*selected operations*" and "*inference*" have no unambiguous meaning.

From claim 18 it is unclear according to which criterion or criteria "*node metadata*" would be qualified as being "*unimportant*".

The phrase "*and one of the same and different*" in claim 19 is not understood.

As regards claim 21, it is unclear from where a "*folder name*" and a "*file name*" would be known and how exactly these items would be used for generating "*names*".

3.3 For these reasons, the main request is not allowable.

4. Auxiliary request I - Article 84 EPC 1973

4.1 The clarity objections raised in points 3.2.1, 3.2.2 and 3.2.4 above apply accordingly to claim 1 of auxiliary request I.

4.1.1 As regards dependent claims 2, 6, 7 and 9, reference is made to the observations given in point 3.2.5 above for corresponding claims 14 and 18, 19 and 21 of the main request.

4.2 For these reasons, auxiliary request I is not allowable.

5. Auxiliary requests II, III and IV

5.1 Article 123(2) EPC

Claim 13 of auxiliary request II includes the steps of "*generating a name for each of the one or more selected nodes (104-108) based on the respective node metadata*" and "*further comprising generating a first set of names for a first user and a second set of names for a second user, wherein the first and second sets of names are generated from the same data structure (102)*" as separate, independent steps of generating names. No

basis of disclosure is apparent for such subject-matter.

Moreover, it is not apparent on which pieces of information the specific aggregations of features according to claims 1 and 12 of auxiliary request IV are based, notably the presentation of a "*valuation as a number*" in combination with "*node identifier data*" in the form of "*word text*".

5.2 Article 84 EPC 1973

The clarity objections raised above against the main request apply mutatis mutandis to the corresponding claims of auxiliary requests II, III and IV.

As regards claims 1 and 12 of auxiliary request IV, a further ambiguity arises due to the use of an apparently inconsistent terminology, that is "*node identifier data*" versus "*description*" or "*names*".

5.3 For these reasons, auxiliary requests II, III and IV are not allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

R. Schumacher G. Assi

Decision electronically authenticated