Datasheet for the decision of 22 May 2014

Case Number: T 0797/09 - 3.5.01
Application Number: 02447090.8
Publication Number: 1260919
IPC: G06F17/30
Language of the proceedings: EN

Title of invention:
A method of storing, retrieving and viewing data

Applicant:
Knowliah n.v.

Headword:
Cognitive view/KNOWLIAH

Relevant legal provisions:
EPC Art. 54(1), 54(2), 56

Keyword:
Novelty - user (no - not distinguished from administrator) - selection of elements (no - not limited to during retrieval operation) - interface during creation of tree (no - not limited to retrieval operation) - filtering elements (no - not distinguished from selection)
Inventive step - selecting elements from lists (no - routine design)
Late filed request - filter applied (not admitted - late and sequence of steps not clear)
Decisions cited:

Catchword:
Case Number: T 0797/09 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 22 May 2014

Appellant: Knowliah n.v.
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 24 November
2008 refusing European patent application No.
02447090.8 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman S. Wibergh
Members: W. Chandler
P. Schmitz
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse European patent application No. 02447090.8 for lack of novelty (Article 54(1) and (2) EPC) and lack of inventive step (Article 56 EPC).

II. The examining division decided that the invention as defined in claim 1 of the main and second auxiliary requests was not novel over US 5 752 025 (D4). Claim 1 of the first and third auxiliary requests was considered to lack an inventive step over D4.

III. In the statement setting out the grounds of appeal, dated 24 March 2009, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the refused requests. The appellant also had a request for oral proceedings.

IV. In the communication accompanying the summons to oral proceedings, the Board set out its preliminary opinion that none of the requests appeared to involve an inventive step over D4. In a reply, dated 22 April 2014, the appellant filed two additional requests to be considered as the second and third auxiliary requests. The second and third auxiliary requests previously on file were maintained and renumbered as the fourth and fifth auxiliary requests. The appellant also submitted additional arguments in favour of the main request.

V. At the oral proceedings on 22 May 2014, the appellant filed a sixth and a seventh auxiliary request. The appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the main request or auxiliary request 1 filed
with the grounds of appeal, or auxiliary request 2 or 3
filed with letter of 22 April 2014, or auxiliary
request 4 or 5 filed with the grounds of appeal as
auxiliary requests 2 and 3, or auxiliary request 6 or 7
filed during the oral proceedings before the Board. At
the end of the oral proceedings the Chairman announced
the decision.

VI. Claim 1 of the main request reads as follows:

"A method for retrieving objects from a database which
has been created by a method comprising the steps of:
   defining a list of cognitive properties (100),
   which are potentially relevant to all the objects which
   are to be saved in said database,
   providing a repository (3) of electronic memory, in
   which to save objects (text files, pictures, sound
   files, etc...),
   providing at least one object (2), preferably an
   electronic file,
   attributing for said object (2), a value to each
   cognitive property in said list, thereby creating a
   list of cognitive elements for said object,
   attaching said list (5) of cognitive elements to
   said object,
   saving said object (2) into said database, so that
   all objects in the database, enriched with at least
   said cognitive elements, are stored in a non-
   hierarchical group of objects, in said repository (3)
   of electronic memory

said method of retrieving comprising the steps of:
   selecting one or more cognitive properties in
relation to said database,
attributing a value to each of the cognitive properties which were selected, thereby defining a number of desired cognitive elements,

receiving a group of documents, which are equipped with all or a part of said desired cognitive elements,

characterized in that a tree structure is provided, allowing an overview of the consecutive cognitive elements desired by the user, and wherein said tree structure comprises folders and subfolders (20, 21, 22), every (sub)folder being related to a cognitive element, wherein the order in which said folders and subfolders appear in the tree structure is not pre-defined but dependent on the order in which said cognitive elements are selected."

VII. Claim 1 of the first auxiliary request adds to the end the words "by the user".

VIII. Claim 1 of the second auxiliary request, apart from the substitution "a group of objects" for "a group of documents", further adds to the end:

"wherein user interfaces are provided during creation of the tree structure, allowing the user to define the subsequent cognitive elements he wants to include and to define at which point he wants to receive the group of objects".

IX. Claim 1 of the third auxiliary request also substitutes "a group of objects" for "a group of documents" and adds to the end of claim 1 of the first auxiliary request:

"through the following subsequent steps:
1. through a user interface, requesting a first list of cognitive elements of a first type, and selecting one cognitive element of said list,
2. through a user interface, requesting a second list of elements of a second type in combination with the selected cognitive element of the first type, and selecting one cognitive element of said second list,
3. possibly repeating step 2 one or more times, requesting one or more further lists of cognitive elements in combination with all previous selected elements, and selecting a further cognitive element in each of said one or more further lists,
4. requesting a list of objects possessing all of the selected cognitive elements".

X. Claim 1 of the fourth auxiliary request adds to the end of claim 1 of the main request:

"and wherein said tree structure is further defined by a filter, said filter defining one or more cognitive elements to be excluded from said tree structure".

XI. Claim 1 of the fifth auxiliary request is a combination of claim 1 of the first and the fourth auxiliary requests.

XII. Claim 1 of the sixth auxiliary request adds to the end of claim 1 of the third auxiliary request:

"wherein said tree structure is further defined by a filter, said filter defining one or more cognitive elements to be excluded from said tree structure, and wherein the filter is defined before the cognitive elements are selected by performing the above steps 1 to 4".
XIII. Claim 1 of the seventh auxiliary request adds to the end of claim 1 of the third auxiliary request:

"wherein said tree structure is further defined by a filter, the filter being defined by specifying one or more cognitive elements, and wherein the tree structure only shows cognitive elements which are attached to objects possessing the element or elements specified in the filter, said filter being defined before the cognitive elements are selected by performing the above steps 1 to 4".

XIV. The appellant's arguments may be summarised as follows:

The claimed invention differed from D4 in that the order in which the cognitive properties appeared in the tree structure was not predefined but dependent on the order in which these elements were selected by the user during a retrieval operation.

The "user" meant the person who was performing a search in the database, and not the system administrator.

The objective technical problem solved by this difference was that of providing a more flexible method of searching a database.

The claimed invention involved an inventive step because D4 did not suggest a way to modify or adapt the method to arrive at a method in which the user defined the order of the cognitive elements. D4 rather insisted that the order of the cognitive elements had to be predefined, which taught away from the invention.

Reasons for the Decision
1. The application relates to storing, searching, retrieving and viewing objects, such as documents, stored in a database (cf. paragraph [1] of the published application). Each database has a number of predetermined "cognitive properties" that might be relevant to its objects ([35]), e.g. relating to their nature or their content. Each object is enriched by attributing values to each of these properties and the property/value pairs are called "cognitive elements" ([41]). A search involves inputting the desired values of the properties, i.e. desired cognitive elements, via an interface (Figure 5; [54] and [56]). The search results are displayed in a hierarchical tree structure with folders and subfolders having the property names given in the search (Figure 7). The characteristic feature is that the hierarchy of folder and subfolder names is not pre-defined but is dependent on the order in which the desired cognitive elements are selected ([59]). Figure 7a shows the results of a search for "marketing" documents in "English" for "Product 3", in that order, entered as shown into the interface in Figure 5. The invention is said to allow the user to follow his own thinking process, and to see the representation of that process on the screen.

2. D4 also relates to displaying objects (e.g. contact name records from a database) in the form of a hierarchical data tree ("categorization table") that gives a view of the data (column 2, lines 52 to 56 and Figure 6). The objects have fields that represent attributes of the objects (column 6, lines 25 to 27) and can therefore be regarded as cognitive properties in the sense of the present application. The form and content of the data tree depends on data in a header
Properties that are to appear in the tree are chosen as "category columns" (Figure 1: 22; column 7, lines 15 to 16). The header table in Figure 5 shows an example of the properties "Company", "Division" and "Department" that are to be selected for the display of records from a database of contact names. Values in the rows determine the desired values of these properties, hence the desired cognitive elements to be displayed (column 7, lines 28 to 32). For example, in Figure 5, row 162 attributes "LMN" to the "Company" property, "Corporate" to the "Division" property and "Human Resources" to the "Department" property. The result is the tree of Figure 6. The order of the headings and subheadings (corresponding to folders and subfolders) is that of the properties ("category columns") in the header table.

3. Claim 1 of all requests is a curious construction. It is a method (for retrieving objects) using a product (database) by process (assigning the cognitive elements). The requests differ only by the last feature(s) of the characterising part. It follows from the above and it was common ground that D4 discloses all the features of the pre-characterising part, namely a method of retrieving objects from a database, enriched with cognitive elements, by assigning values to cognitive properties (in the header table). D4 also discloses the first part of the characterising part, namely providing a tree structure (categorization table) allowing an overview of the cognitive elements. Moreover, as mentioned above, in D4 the order in which the folders and subfolders appear in the tree structure depends on the order that they are arranged in the header table 14. The first issue to be decided is
whether this order is "dependent on the order in which [the] cognitive elements are selected".

4. In the Board's view it is. The claimed selection must be seen in the context of the previous two features of the characterising part. These specify that it is actually a number of cognitive properties that are selected and then attributed a value, thereby "defining a number of desired cognitive elements". Thus, the order of selecting the cognitive elements is in fact the order of selecting cognitive properties and attributing values to them. It follows from the description of D4 above that the order of selecting the properties is the order of allocating the properties ("category columns") in the header table. Thus, the meaning of the order in which the cognitive elements are selected in terms of D4 is actually the order of the category columns. Since the order of the folders and the subfolders is that of the category columns in the header table, D4 anticipates this feature.

5. The appellant attempted to establish a distinction over D4 in the dimensions of "who" was doing the selecting, "when" the selection was performed and "how" the selection was performed.

Main and first auxiliary request

6. The appellant's main argument concerned the "who" dimension. It was that, in the invention, the "user" selected the cognitive elements at the time of data retrieval, whereas in D4 a system administrator defined the order when creating the header table. The "user" was said to be implicit in the main request and explicit in the first auxiliary request. In the Board's view, however, a system administrator is a "user", 
albeit with enhanced access rights. In fact, the application itself ([29]) states that the user can be the author of a document or the person who is responsible for the maintenance of the database. Moreover, the administrator of a database may interact with the database in many ways, including performing a search in the database. Thus, the system administrator who creates the database and the person who performs the retrieval operation after the database has been created may be the same person. Already for this reason, the Board does not see that the claimed method may be distinguished from the method in D4 by the designation of the person who is performing it. It need therefore not be decided whether as a matter of principle a method claim can be limited by the characteristics or skills of a person performing the method.

7. Concerning the "when", the appellant argued that the selection of cognitive elements was claimed as part of the retrieval operation and therefore had to be interpreted as occurring during the retrieval operation. However, when a user performed a retrieval operation in D4, the order of the cognitive elements had already been defined by the system administrator. A user wanting to retrieve objects from the database in D4 would only be able to interact with the system by clicking on the '+' and '-' signs to expand or collapse the headings. The system administrator might be able subsequently to change the order, but in that case, the "selecting" step would not be a part of a self-contained retrieval operation.

8. The Board notes that the method of retrieving according to claim 1 contains only one step which defines an actual retrieval operation, namely the step of
"receiving a group of objects, which are equipped with all or a part of said desired cognitive elements". The preceding steps of "selecting" and "attributing a value" serve to define the desired cognitive elements for the purpose of retrieving the objects having those elements from the database in the next step. In the Board's view, claim 1 does not specify the proximity between the steps but rather the order in which the steps are performed: the selection of cognitive elements is done after the database has been created, but before the objects are actually retrieved from the database. However, in D4, as mentioned above, entries in the header table represent the selection of the cognitive elements. This is also done after the database has been created and before the objects are retrieved to display the tree. Thus, the Board considers that the selection of cognitive elements in D4 is part of a method of retrieval as defined in claim 1 of the main or first auxiliary request.

9. Accordingly, claim 1 of the main and first auxiliary request is not new (Article 54(1) and (2) EPC).

Second auxiliary request

10. This request additionally goes in the "how" direction and attempts to distinguish the method by specifying a user interface "during creation of the tree structure" that allows the user to define "subsequent" cognitive elements. The appellant essentially argued that this feature distinguished between two selection stages, a first where the original cognitive elements were selected and a second that occurred during the rendering of the tree on the display where additional elements could be added, i.e. interactively. D4 did not disclose the possibility of adding subsequent elements
during the rendering stage. In fact, it did not disclose a user interface of any kind.

11. However, in the Board's view the expression "during the creation of the tree structure" is so general that it covers creating the tree at any time, both initially and in a subsequent refinement step. Thus it is anticipated by the mere possibility of selecting elements and generating the tree in D4. Furthermore, the Board considers that any "user" input, be it from a database administrator or a person looking to retrieve information from the database, implicitly requires an interface of some kind, e.g. a command prompt. The claim does not contain any details defining this user interface.

12. Accordingly, claim 1 of the second auxiliary request does not add anything new, so that it is still not novel (Article 54(1) and (2) EPC).

Third auxiliary request

13. This request also introduces an interface that essentially allows the user to select the desired cognitive elements in sequence from lists and then request a list of objects possessing all of the selected cognitive elements. As in previous requests, the claimed method allows the user to select the cognitive elements he wants to include in the tree. The only difference is, in the Board's view, that lists of the available cognitive elements are provided, from which the user can select the desired ones.

14. However, it was normal in data retrieval systems at the priority date to provide lists of available options to the user. Indeed, many systems which accepted user
input had a help function allowing the user to request such lists. In the Board's judgement, it would have been a matter of routine design to provide such a possibility for the database system in D4 to include lists of available cognitive elements.

15. Accordingly, claim 1 of the third auxiliary request does not involve an inventive step (Article 56 EPC).

_Fourth auxiliary request_

16. Claim 1 of the fourth auxiliary request adds to claim 1 of the main request that the tree structure is "further defined by a filter" that excludes one or more cognitive elements.

17. The appellant argued that the filter provided a further step, in addition to the step of selecting the cognitive elements to be included in the tree structure. The filter was applied before creating the tree, independently of the order of the cognitive elements.

18. The Board is not satisfied that claim 1 defines such a further step. The claim defines the filter as related to the tree structure, and not as a method step. Furthermore, the Board considers that, by selecting an element from a set of elements, one by definition excludes or "filters" the other elements of the set.

19. Accordingly, claim 1 of the fourth auxiliary request does not add anything new, so that it is still not novel (Article 54(1) and (2) EPC).

_Fifth auxiliary request_
20. Claim 1 of the fifth auxiliary request is a combination of that of the first and fourth auxiliary requests. As neither of these claims are new, it follows that claim 1 of the fifth auxiliary request is not new either (Article 54(1) and (2) EPC).

Admissibility of the sixth and seventh auxiliary requests

21. Claim 1 of the sixth and seventh auxiliary requests were filed at the oral proceedings before the Board in an attempt to define the sequence in which the filtering and selection of cognitive elements take place. Both requests build on a combination of claim 1 of the third and fourth auxiliary requests and specify that the filter (in the fourth auxiliary request) is defined before the cognitive elements are selected by performing steps 1 to 4 (in the third auxiliary request).

22. In the Board's view it is not clear how selecting the cognitive elements in steps 1 to 4 is related to the previously claimed steps of selecting one or more cognitive properties and attributing a value to the cognitive properties. In other words, the sequence in which the various steps are to be performed is not clear. This problem was already present in claim 1 of the third auxiliary request. However, with the addition of the filter, being applied at a particular point in the sequence, the lack of a clear definition of the sequence of steps is further exacerbated.

23. Since the sixth and seventh auxiliary requests introduce a further deficiency, namely a lack of clarity of the claims (Article 84 EPC), at a late stage of the appeal procedure, the Board makes use of its
discretion under Article 13(1) and (3) RPBA not to admit these requests.

24. Since none of the requests are allowable, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Rauh S. Wibergh

Decision electronically authenticated