BESCHWERDEKAMMERN
DES EUROPÄISCHEN
PATENTAMTS

BOARDS OF APPEAL OF
THE EUROPEAN PATENT
OFFICE

CHAMBRES DE RECOURS
DE L'OFFICE EUROPÉEN
DES BREVETS

Internal distribution code:
(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

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 retreival 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**

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 22 May 2014

Appellant: (Applicant)	Knowliah n.v. Leuvensesteenweg 282c 3190 Boortmeerbeek (BE)
Representative:	Van Malderen, Joëlle pronovem - Office Van Malderen Avenue Josse Goffin 158 1082 Bruxelles (BE)
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

table (Figure 1: 14; column 6, lines 18 to 21).
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