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Datasheet for the decision
of 20 September 2017

Case Number: T 0551/11 - 3.5.01
Application Number: 06827607.0
Publication Number: 1969543
IPC: G06Q10/00

Language of the proceedings: EN

Title of invention:
COMPUTER METHOD AND SYSTEM FOR PUBLISHING CONTENT ON A GLOBAL
COMPUTER NETWORK

Applicant:
Skyword Inc.

Headword:
Assigning keywords to content/SKYWORD

Relevant legal provisions:
EPC Art. 56, 84
Keyword:
Inventive step - mixture of technical and non-technical features - displaying suggested keywords in rank order (no - display of information) - only displaying frequently suggested keywords (no - administrative scheme) - no inventive technical contribution - all requests (no)
Claims - clarity - fifth auxiliary request (no)

Decisions cited:
T 0769/92, T 1194/97, T 0641/00, T 0643/00, T 0258/03, T 0125/04
Case Number: T 0551/11 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 20 September 2017

Appellant: Skyword Inc.
(Applicant)
234 Congress Street 4th Floor
Boston MA 02110 (US)

Representative: Driver, Virginia Rozanne
Page White & Farrer
Bedford House
John Street
London WC1N 2BF (GB)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 13 October 2010 refusing European patent application No. 06827607.0 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman W. Chandler
Members: M. Höhn
F. Schmitz
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 06827607.0 pursuant to Article 97(2) EPC on the ground of lack of inventive step (Article 56 EPC) with regard to prior-art publication:

D1: WO 01/80039 A2.

The examining division essentially argued that all distinguishing features over D1 were in the non-technical domain, because they were related to administrative considerations, which therefore did not provide an inventive technical contribution. Furthermore, it was argued that the alleged problem of high processor load was not solved by the claimed subject-matter.

II. In the statement setting out the grounds of appeal, the appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the main request or the first to fourth auxiliary requests as submitted with the statement setting out the grounds of appeal. Oral proceedings were requested on an auxiliary basis.

III. In its communication, subsequent to the summons to oral proceedings, the Board expressed its preliminary opinion that all requests lacked inventive step (Article 56 EPC). It furthermore appeared that the main request, first and fourth auxiliary requests did not fulfill the requirements of Article 84 EPC.

IV. Oral proceedings were held on 20 September 2017 during the course of which the appellant presented amended
sets of claims according to a main request and first to fifth auxiliary requests replacing the previous requests on file. The Board admitted these newly filed sets of claims into the proceedings.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or one of the first to fifth auxiliary requests, as filed during the oral proceedings.

After due consideration of the appellant's arguments the Chair announced the decision.

V. Independent claim 1 according to the main request reads as follows:

"1. A computer system (100) for publishing content comprising:
computer means (50), operable in a global computer network, for enabling network users to produce respective authored works (29) that are viewable by other network users, a network user being an author-user in connection with producing a respective authored work and a network user being a reader-user when viewing an authored work;
a categorization member (92) coupled to the computer means (50) and for each authored work (29) produced through the computer means (50), enabling a respective author-user of the authored work to categorize content of the authored work (29) by the author-user assigning one or more keywords or one or more key phrases to the authored work (29), wherein the assigned one or more keywords or the assigned one or more key phrases are stored as metadata of the authored work,
publication distribution means (11) coupled to the
computer means, for each authored work (29), the
publication distribution means (11) enabling the
respective author to designate which users are allowed
to view the authored work (29);
wherein the computer means is operable to enable users
to search by or navigate by the one or more keywords
and key phrases, and to display in rank order keywords
or key phrases assigned to an authored work and in that
the categorization member (92) further enables reader-
users to re-categorize authored works (29) by
suggesting alternative taxonomical categories,
including new categories, and/or alternative keywords
or key phrases, said categorization member configured
to add said suggested alternative taxonomical
categories and/or alternative keywords or key phases
that have been suggested a threshold number of times,
wherein the alternative keywords or key phrases are
added to the metadata of the authored work."

Claim 1 of the first auxiliary request essentially adds
to claim 1 of the main request that the categorization
member is configured to suggest the one or more
keywords or key phrases that are stored as metadata.
Claim 1 of the second auxiliary request further adds
that this is based on content of the authored work.

Claim 1 of the third auxiliary request essentially adds
to the end of claim 1 of the main request that reader-
user suggested alternative taxonomical categories and/
or alternative keywords are ranked by frequency. Claim
1 of the fourth auxiliary request further adds that the
author-user assigned keywords have a default rank.

Claim 1 of the fifth auxiliary request further adds to
claim 1 of the third auxiliary request that the
computer means "displays a taxonomical categorization of a given authored work in a manner that enables users to select any level of that categorization and in response to said user selection, the computer means enables display of other authored works similarly categorized as each other".

VI. The appellant argued essentially as follows:

D1 did not disclose important features of claim 1. In particular, D1 did not disclose enabling reader-users to re-categorise authored works to be stored as metadata and displaying keywords in rank order. A rank according to the invention defined a hierarchical organisation. Furthermore, D1 did not disclose that alternative keywords or key phrases were added to the metadata.

The aim of the invention was to improve the navigation and searching of large amounts of data. Thus, the technical problem solved could be seen as how to find published content quickly and efficiently, and in a manner requiring less computer resources and processing power. This was a technical consequence of providing a mechanism by which the inputs are taken, applied and used.

This problem was solved by displaying in rank order, keywords or key phrases assigned to an authored work. Reader users could add further keywords or key phrases, or suggest new or alternative taxonomical categories in order to assist other similarly situated reader users to more effectively navigate the Internet. Reader users could provide many such suggestions. In order to prevent every suggestion from appearing, the invention
only added them when they had been suggested a threshold number of times.

The use of a hierarchical rank order to which reader users may collectively add new suggested keywords or key phrases, provided a technical contribution according to prevailing case law. It enabled the user to manage a technical task, such as searching and retrieving authored works stored in a database as in T 0643/00. The technical contribution was similar to that provided in T 0769/92, in that it helped to enable tasks involving the format of input data (i.e. the suggestions made by the reader-users) rather than mere data output and display of information (as in T 0125/04). The invention therefore provided a technical contribution over the prior art.

Reasons for the Decision

Introductory remarks

1. The claimed invention is directed to a system and method for publishing content. Such content is categorised by the author assigning keywords or key phrases used for searching or navigating. Categories, keywords or key phrases can later on be re-categorised by other users and for this purpose are displayed in rank order. Depending on how often a re-categorisation has been suggested, it is replaced or added.
Main request

2. Article 56 EPC - Inventive step

2.1 The independent claims are directed to a mix of technical and non-technical features. Claim 1 is directed to a computer system which is technical per se. The Board also does not dispute that the corresponding method according to independent claim 14 appears in a technical context. The method can be considered to be performed by technical means, because it involves a computer with means for storing data and means for processing data, and, therefore, has technical character. Accordingly, the claimed subject-matter is an invention in the sense of Article 52(1) EPC (see T 258/03 "Auction method/HITACHI").

2.2 However, the question of inventive step requires an assessment of whether the invention makes a technical contribution over the prior art. Features which do not make such a contribution cannot support the presence of an inventive step (see T 641/00 "Two identities/COMVIK", Headnote I).

2.3 The Board agrees with the analysis of D1 with regard to the features of claim 1 in the contested decision (see point 9.1).

D1 discloses the following features set out in independent claim 1:

A computer system for publishing content (page 2, lines 1 and 2) comprising:
computer means, operable in a global computer network, for enabling network users to produce respective
authored works that are viewable by other network users, a network user being an author-user in connection with producing a respective authored work and a network user being a reader-user when viewing an authored work ("server 110 provides for online publishing of media by a member from a remote computer system", last paragraph on page 6; "members may upload media content to the website for broadcast on demand to users over the Internet", see page 8, paragraph 4; "viewers can also access webcast content previously uploaded for download or streaming" in paragraph 2 on page 10);
a categorization member coupled to the computer means and for each authored work produced through the computer means, enabling a respective author-user of the authored work to categorize content of the authored work, the author-user assigning one or more keywords or one or more key phrases to the authored work ("website would be divided and indexed into major categories of interest, so viewers can find the audio and video they want quickly", second paragraph on page 18; "search block 812 that enables a user of the system to find member's webcast content and other webcast sites on the Internet", item (c) on page 20; "metadata" in paragraph 2 on page 23);
publication distribution means coupled to the computer means, for each authored work, the publication distribution means enabling the respective author to designate which users are allowed to view the authored work (see page 18, paragraph starting with "The system and method thus [...]" as well as page 19, item (f): "downstreaming permissions block 809")
wherein the computer means is operable to enable users to search by or navigate by the one or more keywords and key phrases, and to display keywords or key phrases assigned to an authored work (page 20, item (c) "search
block 812" and page 23, meta-data is considered to comprise keywords, see also figure 10 in which videos are described via "key phrases"; also in D1 an order has to be chosen for the meta-data which is stored in a database, see also page 9, second paragraph which in detail discloses the use of the meta-data).

Particularly, the Board refers to page 23, second paragraph of D1, which discloses that meta-data is used for search purposes and it can be edited. The fact of editing meta-data for advanced search ("very granular search") at least implies the use of categories or keywords/key phrases. According to D1 meta-data resides in an SQL database, disparate from the actual media file (see page 9, second paragraph). If not synonymous as argued in the contested decision (see page 5, first paragraph), knowing about SQL databases renders clear that meta-data can be compared to an index in the relational database. D1 mentions as examples title or member's name (see page 23, second paragraph), i.e. keywords or key-phrases according to claim 1. Using a relational database like SQL in D1 therefore also involves accommodation and consideration of a variety of keywords (in contrast to the appellant's argument, see e.g. on page 4, second paragraph of the statement setting out the grounds of appeal).

Furthermore, editing meta-data in D1 is considered to be within the broad formulation of a re-categorisation according to claim 1 and also allows continued updating and improvement of categorisation (in contrast to the appellant's argument, see e.g. on page 4, third paragraph of the statement setting out the grounds of appeal).
2.4 D1 does not disclose the same re-categorisation as claim 1, i.e. displaying in rank order keywords or key phrases and adding suggested alternatives once they have been suggested a threshold number of times.

With regard to displaying the keywords in rank order, the Board considers the rank order of the displayed information to be directed to the information content as such. The mere fact of displaying such information was known from D1, because in order to edit meta-data such data must be displayed (e.g. using a web-page, see D1, page 9, second paragraph, last sentence). Regarding the rank order, this is considered to be displaying of cognitive information and not functional data (see T 1194/97), since the system works the same way irrespective of what the rank order actually is. A wrong ranking would not affect the technical functioning of the claimed system.

2.5 The appellant alleged that search and navigation through large amounts of data content was improved by the invention. The appellant argued during oral proceedings that this resulted from using suggestions of keywords from many reader-users rendering the keywords better, since what many users came up with was usually of higher relevance and quality.

However, such large scale effects were well known principles in the fields of statistics and economic analysis and, hence, stem from business related administrative considerations. The basic idea behind the invention is to use only keywords (or key phrases) that many users suggest. This, in the Board's judgement, is an entirely administrative and therefore non-technical concept, which per se does not provide for a technical contribution over the prior art. The
quality of a keyword is a highly subjective issue and not linked to any technical data or to any technical considerations. The claimed system merely provides an infrastructure for potentially taking advantage of those large scale effects, but this does not necessarily lead to an improved search and navigation.

This is all the more so since the value for the threshold is not specified and therefore can also have the value of two, three or four etc.

2.6 The Board considers the claimed way of re-categorisation to be within the administrative, i.e. non-technical domain, which cannot involve an inventive technical contribution over the disclosure of D1. It is regarded as an abstract non-technical concept how to organise the way categories, keywords etc. are provided and used, which is not driven by technical considerations, but merely by abstract administrative considerations. Particularly, it is not a technical feature who the person categorising content is, be it the author or a reader. It depends on the intellectual background and experience of the individual suggesting a keyword whether it is suitable or not, but not on the role (author/reader) the person plays, and it is irrespective of technical considerations for implementing such a concept on a computer system.

In contrast to the present invention, decision T 0643/00 referred to by the appellant concluded that a technical effect resulted from overcoming physical limitations of the size and resolution of a computer screen, but not from making the searching easier. In the present case, however, the use of a hierarchical rank order to which the user may collectively add new suggested keywords or key phrases does not provide a
corresponding technical effect. It might reduce the mental effort required, which depends on subjective user skills or preferences. The Board is not convinced that an objectively credible technical effect is thereby achieved and regards this distinguishing feature to be only a secondary consideration not providing a technical contribution.

Decision T 0769/92 further referred to by the appellant essentially held that output formats are usually dictated by subjective preferences of humans and do not provide for a technical contribution, whereas features related to a specific input format might involve a technical contribution. Despite being quite old and having been overturned by more recent decisions of the Boards of Appeal, the present distinguishing features do not correspond to a specific input format as argued by the appellant (see e.g. page 6, paragraph 7 of the letter dated 16 August 2017). Claim 1 does not specify a specific format of an input for suggestions made by reader-users. Rather the rank order specifies an output format, which according to the reasoning of T 0769/92 does not provide for a technical contribution. The appellant's argument therefore does not convince the Board.

The further decision referred to, T 0125/04, essentially relates to a mere presentation of output data and does not support the appellant's arguments.

2.7 The Board does not agree with the appellant that the invention reduces the amount of computer resources and processing power required in order to execute a search as a technical consequence of providing a mechanism by which the inputs are taken, applied and used. Rather, the Board concurs with the contested decision (see
point 9.5) that in the present case the alleged reduction of processor load would depend on the intellectual inputs provided by human users and the resulting tags selected, and the claimed system would therefore not necessarily result in a reduction of processing power required.

Even if a reduction of processing power was achieved, this would be the mere consequence of administrative measures and subjective human decisions, i.e. subjective user skills or preferences. Technical considerations are only involved through their implementation on a technical system such as the one disclosed in D1. Any administrative scheme, once implemented on a computer system, will have consequences in respect of the load on the technical means used.

2.8 The person skilled in the art within the meaning of Article 56 EPC, a computer expert provided with the complete description of the non-technical abstract administrative concept, in particular with the basic idea to use only keywords (or key phrases) that many users suggest, would have considered the claimed implementation obvious in view of the normal skills and the general knowledge of computer programming in view of the known system in D1.

The appellant's arguments to the contrary therefore do not convince for the aforementioned reasons.

2.9 In the absence of any technical contribution beyond the straight-forward computer-implementation, the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC).
2.10 Similar objections and arguments apply *mutatis mutandis* to corresponding method claim 14.

Auxiliary requests

3. Regarding the first auxiliary request, the Board concurs with the decision under appeal that the added feature of claim 1 according to which the categorization member is configured to suggest one or more keywords or key phrases relates to an administrative task, the implementation of which does not involve an inventive technical contribution (Article 56 EPC). The Board is not convinced that suggesting keywords or key phrases is technical. Claim 1 is silent on how this is exactly achieved, e.g. whether some kind of artificial intelligence is needed. The appellant referred to page 23, first paragraph of the description of the present application, but the passage referred to does not give technical details in this regard.

3.1 In addition, D1 also discloses to automatically extract meta-data from the content (see figure 3 "Extract Meta-data" and page 9, second paragraph, "The meta-data... gets parsed out of the local file and input into the appropriate field... as part of the media management process"). The Board does not see a technical difference between the terms "suggest" used in claim 1 and "extract" in D1.

3.2 The additional feature therefore does not provide an inventive technical contribution over the disclosure of D1.

4. Regarding the second auxiliary request, the Board considers the feature "based on content of the authored
work" not to add further information, since the wording of the respective feature in claim 1 according to the first auxiliary request has been interpreted in the same way. The same objections and arguments therefore apply (see point 4 above).

4.1 The additional feature therefore does not provide an inventive technical contribution over the disclosure of D1.

5. Regarding the third auxiliary request, the Board also considers the feature "ranked by frequency" not to add further information, since the wording of the respective feature in claim 1 according to the main request has been interpreted in this way. The same objections and arguments therefore apply (see points 3.4 to 3.6 above).

5.1 The additional feature therefore does not provide an inventive technical contribution over the disclosure of D1.

6. Regarding the fourth auxiliary request, the provision of a default rank does not require an inventive technical contribution, since it only further refines the administrative concept of which the implementation is still regarded as obvious. Again, it is noted that the role of the user (author/reader) who categorises is in the non-technical domain.

6.1 The additional feature therefore does not provide an inventive technical contribution over the disclosure of D1.

7. The fifth auxiliary request additionally specifies what is displayed, but not how it is displayed ("display a
taxonomical categorization of a given authored work in a manner that enables users to select any level" and "enables display of other authored works similarly categorized as each other"). The Board does not agree with the appellant's argument that these additional features yield an improvement of the man-machine-interface. It rather defines a presentation of information content, which can differ only in administrative aspects. The implementation in a technical infrastructure as already present in D1 would not involve an inventive step (Article 56 EPC). The type of information presented is therefore considered to be in the non-technical domain. The appellant did not provide convincing arguments that an inventive technical contribution is achieved.

7.1 The additional feature therefore does not provide an inventive technical contribution over the disclosure of D1.

7.2 Furthermore, the added features do not use information defined in the previous requests, are not connected to the adding of keywords or key phrases and are specified by the result to be achieved rather than specifying the technical means for achieving it. For this reason, the added features also lack clarity (Article 84 EPC).

8. Therefore, none of the requests fulfils the requirements of the EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.
The Registrar: T. Buschek

The Chairman: W. Chandler

Decision electronically authenticated