Datasheet for the decision
of 13 May 2016

Case Number: T 0022/13 - 3.5.05
Application Number: 06720426.3
Publication Number: 1844386
IPC: G06F3/00, G06F17/30
Language of the proceedings: EN

Title of invention:
SYSTEM FOR BROWSING THROUGH A MUSIC CATALOG USING CORRELATION METRICS OF A KNOWLEDGE BASE OF MEDIASETS

Applicant:
Apple Inc.

Headword:
BROWSING THROUGH A MUSIC CATALOG USING CORRELATION METRICS OF A KNOWLEDGE BASE OF MEDIASETS/APPLE

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no) - mixture of technical and non-technical features - obvious alternative
Decisions cited:
T 0641/00

Catchword:
Case Number: T 0022/13 - 3.5.05

DECISION
of Technical Board of Appeal 3.5.05
of 13 May 2016

Appellant: Apple Inc.
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 5 July 2012 refusing European patent application No. 06720426.3 pursuant to Article 97(2) EPC.

Composition of the Board:
Chair A. Ritzka
Members: M. Höhn
F. Blumer
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division of the European Patent Office posted on 5 July 2012 refusing European patent application No. 06720426.3 pursuant to Article 97(2) EPC on the grounds of Article 123(2) EPC, lack of clarity (Article 84 EPC) and lack of inventive step (Article 56 EPC) with regard to prior-art publication:


II. The notice of appeal was received on 13 September 2012. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 15 November 2012. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the main request, filed with the statement setting out the grounds of appeal. Further, the appellant referred to a first auxiliary request which comprises claims 1 to 20 "that were provided in to the Examining Division, on 23 May 2012, i.e. the claims considered by the Examining Division in the decision to refuse" (see grounds of appeal, point 3). Oral proceedings were requested on an auxiliary basis.

III. By communication dated 3 March 2016 the board summoned the appellant to oral proceedings on 13 May 2016. In an annex to the summons the board expressed its preliminary opinion that both requests lacked inventive step (Article 56 EPC). Furthermore, it appeared that the auxiliary request did not fulfil the requirements of Article 84 EPC and of Article 123(2) EPC.
IV. By letter dated 13 April 2016, the appellant submitted three sets of claims according to an amended main request and first and second auxiliary requests, supported by arguments in favour of inventive step.

V. Oral proceedings were held on 13 May 2016. The auxiliary requests were withdrawn. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request as filed with letter dated 13 April 2016.

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

"1. A method of assisting a user in browsing an electronic catalog of media items to build a playlist, the method comprising: (a) obtaining access to metric values (504) derived from a knowledge base consisting of a collection of mediasets, wherein the mediasets are lists of media items that have been grouped by users and are associated with the electronic catalog; wherein the metric values reflect a level of co-concurrency for each of pairs of media items within the knowledge base of mediasets; and further wherein the co-concurrency metric values indicate, for each pair of media items (i,j), how many times item i and item j appear together within any of the mediasets of the knowledge base; (b) receiving from the user an initial selection (506) of media items from the catalog to define an input media set; (c) for each of the media items of the input media set, generating a respective navigation list of media items (508) based on the metric values;"
(d) communicating the generated navigation lists (512) for display to the user;
(e) receiving from the user a selection of a respective media item from one of the generated navigation lists (514);
(f) adding the respective selected media item to the input media set (516), as instructed by the user, to generate a new input media set;
(g) for each item of the new input media set, generating a respective new navigation list of media items (518) based on the metric values, the generated new navigation lists including a new navigation list corresponding to the respective selected media item that was added to the input media set in step (f); and
(h) communicating the generated new navigation lists (520) for display to the user;
(i) repeating steps (e) through (h) at least once to realize an interactive browsing session; and
(j) saving a new playlist by storing the current input media set defined following step (i)."

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

Reasons for the Decision

1. Admissibility

The appeal complies with Articles 106 to 108 EPC (see Facts and Submissions, point II above). It is therefore admissible.

2. Article 56 EPC - Inventive step

The board agrees with the decision under appeal that D9 can be considered to be the closest prior art, which
discloses (see in particular the "Instant Recommendation Service" in figures 5 and 6 with col. 14, l. 10 onwards):

- a method of assisting a user in browsing in an electronic catalog of media items, the method comprising (see col.4, l.60 to col.5, l.56; recommendation service for music titles in browsing online catalogue, e.g. Amazon's music catalogue; col.7, l.13-19; catalogue or items, i.e. titles are represented in database 36):

- (a) obtaining access to metric values derived from a knowledge base consisting of a collection of mediasets, wherein the mediasets are lists of media items that have been grouped by users and are associated with the electronic catalog; (see col.12, l.4-9; fig.3 102A - mediasets are lists of media items that were purchased by users which is regarded as grouping, e.g. (User_A - Item_A, Item_C...; User_B - Item_C, Item_D...; col. 12,l.44 to col.13, l.5; fig.3, steps 108 and 110 - commonality index value CI as measure of similarity between two items is regarded as metric value; see also col. 15, l. 16 to 18),

wherein the metric values reflect a level of co-concurrency for each of pairs of media items within the knowledge base of mediasets; and further wherein the co-concurrency metric values indicate, for each pair of media items (i,j), how many times item i and item j appear together within any of the mediasets of the knowledge base; (see col.9, l.2-3 - data that reflects collective interests of the community of users; col.12, l.44 to col.13, l.5; fig.3 - commonality index value CI has to be regarded as metric value which indicates, for each item pair the number of customers the two have in common, i.e. popular item_A and Item_B have 70 commonalities; col.9, l.27 to 29 - besides using
popular items, method may also include all items rather than just the popular items);
- (b) receiving from the user an initial selection of media items from the catalog to define an input media set; (fig.2 - step 80; col.10, 1.13 to 63; a users purchase history and item ratings profile depend on user selections which have been stored; the user is prompted to select items of interest or added items in a user's shopping cart; see fig. 6 "refine recommendations" and fig. 5 with steps 180 to 194 corresponding to steps 80 to 94 in fig. 2);
- (c) for each of the media items of the input media set, generating a navigation list of media items based on the metric values (see fig. 2, step 82; col. 10, 1.64 to 66; fig. 5, step 182);
- (d) communicating the generated navigation list to the user for display; (see fig. 2, step 82; col. 10, 1.64 to 66 for each item of known interest, the service retrieves the corresponding similar items list from the similar items table; fig.2 - steps 82, 94; fig. 5, steps 182, 194; col. 11, 1.22 to 51 from multiple similar items lists an appropriately combined recommendations list is generated and returned to the user);
- (e) receiving from the user a selection of a respective media item from the generated navigation list (see fig. 6);
- (f) adding the respective selected media item to the input media set, as instructed by the user, to generate a new input media set (see col. 15, 1.53 to 67);
- (g) generating a new navigation list of media items based on the metric values including those of the selected media item that was added to the input media set in step (f) (see fig. 2, step 82; col. 10, 1.64 to 66; fig. 5, step 182); and
- (h) communicating the generated new navigation list for display to the user (see fig. 6 - "Already own any of these titles? Know you don't like one? Refine your recommendations and we'll immediately show you new choices!", fig. 5 and col. 15, l. 53 to 67 - user can select "more recommendations" or user can select "refine recommendations" link to indicate recommended item ownership, dislike items, request category-specific recommendations, filter out items etc.; details of how the "new choices" are generated after the user refines the recommendations list are not explicitly disclosed).

2.1 In the decision under appeal it was argued that the subject-matter of claim 1 differed from the disclosure of D9 in that step (f) was to define a new input set, and in step (g) for each item of the new input media set, the new navigation list was generated.

2.2 The following features, which the appellant considers to be further distinguishing features over D9, have been added to claim 1 with the appeal:
(i) repeating steps (e) through (h) at least once to realize an interactive browsing session; and
(j) saving a new playlist by storing the current input media set defined following step (i).

2.3 The subject-matter of claim 1 is a mixture of technical and non-technical features. Whilst the claim has a technical character as a whole, it must be considered that part of the features are not of a technical nature and do not contribute to the technical character of the subject-matter of claim 1. Those features are not to be considered to be part of the technical solution and hence, cannot be considered when assessing inventive step following the established COMVIK-approach,
according to the principles set out in decision T 641/00 (OJ EPO 2003, 352, cf Headnote I). Where the claim refers to an aim to be achieved in a non-technical field this aim may legitimately appear in the formulation of the problem as part of the framework of the technical problem that is to be solved, in particular as a constraint that has to be met (cf T 641/00, Reasons, points 3 to 7).

2.4 In particular, the type of data being media items, a collection of mediasets, a navigation list and the resulting list being a playlist, is regarded as a specification of metadata which is related to the cognitive content and does not contribute to the technical character of the claim. This is also true for the resulting playlist of which the information presented to a user is cognitive content that does not contribute to the technical character. The appellant's arguments in this regard (see e.g. points 12 and 16 of the statement setting out the grounds of appeal) therefore do not convince.

2.5 According to D9, a user's purchase history and item ratings profile depend on the user selections that have been stored. The user is prompted to select items of interest or added items in the user's shopping cart (see fig. 6 "refine recommendations" and fig. 5 with steps 180 to 194 corresponding to steps 80 to 94 in fig. 2). The corresponding feature (b) of claim 1 is therefore considered to be implicitly disclosed in D9 and the appellant's arguments in this regard (see points 15 and 18 of the grounds) do not convince the board.

Furthermore, by adding items to the user's purchase history listing (see D9, col. 15, l. 61 to 62), it must
be updated and can be considered to be stored in memory, which is considered to be equivalent to storing the current input set according to feature (j) of claim 1. The same is true for rating such items. For this purpose, the user has to be provided with the items in order to rate corresponding to feature (h) of claim 1. The resulting rating profile is then considered to be stored in order to be accessible as a profile. Therefore, features (h) and (j) are not considered to involve an inventive step.

2.6 Regarding the alleged difference according to features (f), (g) and (i), the board concurs with the decision under appeal that the underlying technical problem, in view of the closest prior art D9, in particular the embodiment according to figures 5 and 6, is regarded as how to implement the generation of the "new choices" in the "Refine your recommendations" process disclosed in D9 (see page 6, first par. of the decision).

D9 hints at refining recommendations (see e.g. figure 6). In the board's view, the skilled person is thereby prompted to perform a loop of the steps as disclosed in figures 2 or 5 of D9. Hence, D9 at least implicitly discloses an iteration step according to feature (i) of claim 1.

The skilled person would naturally use the same recommendations generation process that has already been employed for the same purpose to generate the initial recommendations list (corresponding to steps (b) and (c)), for the user refined recommendations defining the new "items of interest" (corresponding to a "new input set" - see point 2.5 above), as a straightforward and obvious implementation choice.
2.7 The solution according to features (f), (g) and (i) of claim 1 is obvious in view of figure 5 of D9 and also the skilled person's common general knowledge for the following reasons.

The board concurs with the decision under appeal that the process of refining recommendations showing "new choices" would be understood as a new generation routine, based on the newly refined user recommendations as a new input set, corresponding to feature (g). This point of view is emphasised by the fact that D9 also discloses a separate "More Recommendations" process (D9, fig.6, col. 15, l. 49 to 59) that simply displays additional items from the initially generated recommendations list of M items, which does not require a new generation routine.

2.8 According to the teaching of D9, a recommendation list depends on user input by selecting items, i.e. an item list based on user's purchase history or an item ratings profile. Those items have to be stored (see point 2.5 above). In order to refine the recommendations in D9 by rating or indicating ownership of items (see D9, col. 15, l. 60 to 62), the user has to be presented with a list of those items. The 'refine recommendations' implementation, according to figure 6 of D9, therefore involves the input list being reviewed by the user, which requires that the user is presented with a corresponding list each time a refining of the recommendations takes place. The board does not therefore agree with the appellant's arguments to the contrary (see points 20 and 21 of the grounds).

2.9 The appellant argued that according to claim 1 the user was presented with the raw data, whereas D9 only allowed a user to select items on the basis of merged
lists. The claimed concept results in presenting the complete lists such that the user may and has to scan each and every item. In the concept according to D9, the user is provided with a limited list which has been preprocessed according to given rules, such that the user only needs to scan a reduced number of items. The board is aware of this difference, but it regards those approaches as alternative concepts within the skilled person's common general knowledge. Both concepts have specific advantages and disadvantages which were known and therefore obvious to the skilled person. Having those drawbacks in mind the skilled person would either use one or the other where necessary without the need for inventive skills as mere design options.

The board sees that there are minor differences in the rules for selecting media items to be included in the playlist between the teaching of D9 and claim 1. However, these differences depend on the different approach or concept for selecting items which are of an administrative nature, rather than involving technical considerations. The board cannot identify technical effects underlying such differences in the rules, nor have convincing arguments concerning such technical effects been presented by the appellant.

Therefore, the subject-matter of claim 1 does not involve an inventive step (Articles 52(1) and 56 EPC).

Similar arguments apply, mutatis mutandis, to corresponding independent claim 14.

2.10 The subject-matter of claims 1 and 14 is therefore obvious in view of D9 combined with the skilled person's common general knowledge (Article 56 EPC).
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

L. Malécot-Grob A. Ritzka

Decision electronically authenticated