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Datasheet for the decision of 12 December 2013

Case Number: T 2108/09 - 3.5.04

Application Number: 02707014.3

Publication Number: 1384378

IPC: H04N5/445

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Title of invention:
ELECTRONIC PROGRAM GUIDE FOR INDICATING AVAILABILITY OF PAST PROGRAMS IN THE FUTURE

Applicant:
United Video Properties, Inc.

Headword:

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

Catchword:

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Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2108/09 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 12 December 2013

Appellant: (Applicant)	United Video Properties, Inc. 2830 De La Cruz Boulevard Santa Clara, CA 95050 (US)
Representative:	Hale, Peter Kilburn & Strode LLP 20 Red Lion Street London WC1R 4PJ (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 8 June 2009 refusing European patent application No. 02707014.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman:	F. Edlinger
Members:	M. Paci
	C. Vallet

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division refusing European patent application No. 02707014.3 published as WO 02/082808 A1.

II. In the decision under appeal, *inter alia* the following document had been cited:

D2: EP 1126701 A1 (published after the first priority date, but used as a translation of international patent application WO 00/21286 published before that priority date).

III. The application was refused on the ground that the subject-matter of claims 1 and 10 according to the appellant's sole request did not involve an inventive step (Article 56 EPC 1973) in view of D2 and common general knowledge.

IV. With the statement of grounds of appeal the appellant defended the pending claims.

V. In a communication under Article 15(1) RPBA annexed to the summons to oral proceedings the board expressed *inter alia* the preliminary opinion that the subject-matter of claim 1 did not involve an inventive step when starting from D2.

VI. In a letter of reply dated 12 November 2013, the appellant filed amended claims according to a main and first to fourth auxiliary requests, replacing the claims previously on file.

VII. On 12 December 2013, the board held oral proceedings, at the end of which it gave its decision orally.

VIII. The appellant's final requests are that the decision under appeal be set aside and that a patent be granted on the basis of the claims as filed with letter of 12 November 2013 according to a main request or first to fourth auxiliary requests, or in the alternative, on the basis of the claims of the fifth auxiliary request submitted in the oral proceedings before the board.

IX. Claim 1 according to the appellant's **main request** reads as follows:

"A system for providing an electronic program guide for television or radio programs comprising:

means for receiving and storing downloaded program guide listings data for multiple channels;

means for presenting on-screen a selection of currently stored listings of programs from the downloaded data that are currently being broadcast or programs that will be *[sic]* start being broadcast in the future;

means for presenting on-screen some listings of programs from downloaded data that have finished being broadcast;

means for receiving a user selection from the on-screen listings of a program that has finished being broadcast;

means for identifying in the currently stored listings data whether the program of the user selection is scheduled to start being re-broadcast again at a future time;

means for storing the user selection data if no re-broadcast of the program is identified in the listings data;

means for subsequently receiving and storing downloaded further program guide listings data for multiple channels;

means for comparing the user selection data with the subsequently downloaded listings data; and

means for indicating, in the on-screen listings of programs that have finished being broadcast, that the program of the user selection is identified as scheduled to start being re-broadcast again in the future."

X. Claim 1 according to the appellant's **first auxiliary request** reads as follows (the differences compared with claim 1 according to the **main request** are either underlined (additions) or struck out (deletions)):

"A system for providing ... [see point IX *supra*]

...

means for receiving a user selection from the on-screen listings of a function for a program that has finished being broadcast;

..."

XI. Claim 1 according to the appellant's **second auxiliary request** reads as follows (the differences compared with claim 1 according to the **main request** are either underlined (additions) or struck out (deletions)):

"A system for providing ... [see point IX *supra*]

...

means for receiving a user selection from the on-screen listings of a watch or record function for a program that has finished being broadcast;

..."

XII. Claim 1 according to the appellant's **third auxiliary request** reads as follows (the differences compared with claim 1 according to the **main request** are either underlined (additions) or struck out (deletions)):

"A system for providing ... [see point IX *supra*]

...

means for identifying in the currently stored listings data, for each of the listings of programs that have finished being broadcast, including the program of the user selection, whether the respective program ~~of the user selection~~ is scheduled to start being re-broadcast again at a future time;

...

means for indicating, in the on-screen listings of programs that have finished being broadcast, ~~that~~ the programs ~~of the user selection~~ that are ~~is~~ identified as scheduled to start being re-broadcast again in the future, including the program of the user selection."

XIII. Claim 1 according to the appellant's **fourth auxiliary request** reads as follows (the differences compared with claim 1 according to the **main request** are either underlined (additions) or struck out (deletions)):

"A system for providing ... [see point IX *supra*]

...

means for receiving a user selection from the on-screen listings of a watch or record function for a program that has finished being broadcast;

means for identifying in the currently stored listings data, for each of the listings of programs that have finished being broadcast, including the program of the user selection, whether the respective program ~~of the user selection~~ is scheduled to start being re-broadcast again at a future time;

...

means for indicating, in the on-screen listings of programs that have finished being broadcast, ~~that~~ the programs ~~of the user selection~~ that are ~~is~~ identified as scheduled to start being re-broadcast again in the future, including the program of the user selection."

XIV. Claim 1 according to the appellant's **fifth auxiliary request** reads as follows:

"A system for providing an electronic program guide for television or radio programs comprising:

means for receiving and storing downloaded program guide listings data for multiple channels;

means for presenting on-screen a selection of currently stored listings of programs from the downloaded data that are currently being broadcast or programs that will be *[sic]* start being broadcast in the future;

means for identifying in the currently stored listings data whether programs that have finished being broadcast are scheduled to start being re-broadcast again at a future time;

means for presenting on-screen some listings of the programs from downloaded data that have finished being broadcast;

means for indicating, in the on-screen listings of programs that have finished being broadcast, the programs that are identified as scheduled to start being re-broadcast again in the future;

means for receiving a user selection from the on-screen listings of a function for a program that has finished being broadcast;

means for storing the user selection data if no re-broadcast of the program is identified in the listings data;

means for subsequently receiving and storing downloaded further program guide listings data for multiple channels;

means for comparing the user selection data with the subsequently downloaded listings data; and

means for indicating, in the on-screen listings of programs that have finished being broadcast, that the program of the user selection is identified as scheduled to start being re-broadcast again in the future."

XV. The examining division's reasoning for refusing the application, in as far as it remains relevant to the present decision, can be summarised as follows:

The subject-matter of claim 1 differs from the disclosure of D2 by the feature that subsequent searches for re-broadcast programs are automatically performed in the case that a re-broadcast is not identified in the listings data.

The problem to be solved therefore can be regarded as how to improve the functionality of the "when else" feature of an EPG.

In D2, a user must repeat from time to time a search for a re-broadcast of a past program that he would like to watch. The only difference between these repeated manual searches, which were already practised at the time of TV paper magazines, and the subject-matter of claim 1 is that the subsequent searches are done automatically. The automation of steps which have been manually performed before does not involve an inventive step.

Hence the skilled person would have arrived without an inventive step (Article 56 EPC 1973) at the subject-matter of claim 1 by combining the teaching of D2 with common general knowledge.

XVI. The appellant's arguments regarding claim 1 according to the final requests can be summarised as follows:

Main request

The system of claim 1 differs from that of D2 by the following features:

(a) means for storing the user selection data if no re-broadcast of the program is identified in the listings data;
(b) means for subsequently receiving and storing downloaded further program guide listings data for multiple channels;
(c) means for comparing the user selection data with the subsequently downloaded listings data; and
(d) means for indicating, in the on-screen listings of programs that have finished being broadcast, that the program of the user selection is identified as scheduled to start being re-broadcast again in the future.

Feature (b) is not implicit in the disclosure of D2, even though it is a common feature of electronic program guide (EPG) systems.

The technical effect of these distinguishing features (a) to (d) is that, if no re-broadcast of the selected past program is identified in the listings data, the selection data is stored and later compared to subsequently downloaded listings data, enabling an

indication to be made, on the on-screen listings of programs that have finished being broadcast, that the program of the user selection is identified as scheduled to start being re-broadcast again in the future.

There is no dispute that the objective technical problem can be formulated as "how to improve the functionality of the EPG regarding the re-broadcasting of programs (the 'when else' guide feature)".

It would not have been obvious for the skilled person to have reached the subject-matter of claim 1 starting from D2 for the following reasons.

First, D2 is silent as to what happens when the user selects a listing of a past program which is **not** re-broadcast in the future. Since D2 does not consider this situation worthy of consideration, the skilled person would have had no motivation to address a problem relating to this situation.

Second, even if the skilled person were to identify and address this situation, either nothing would happen or the user would simply be informed that no future re-broadcast has been scheduled. It is only with hindsight that one would propose that the system would be made to store the information of the user's selection and check for a future re-broadcast when additional data are received.

Third, even if the skilled person nevertheless proposed such a system, he would still not reach the claimed subject-matter. Indeed, the skilled person would then use the procedure explained in column 27, lines 41 to 51, of D2 and shown in figure 7, i.e. the system would

be made either to highlight the future re-broadcast of the past program or a dialogue would appear on the screen with information about the future re-broadcast. Neither of these two possibilities corresponds to the claimed feature of "indicating, **in the on-screen listings of programs that have finished being broadcast**, that the program of the user selection is identified as scheduled to start being re-broadcast again in the future" (emphasis added).

First and second auxiliary requests

The above reasoning for claim 1 of the main request also applies to claim 1 of the first and second auxiliary requests.

Third to fifth auxiliary requests

The subject-matter of claim 1 of each of these requests is further distinguished from D2 by the feature that a search for re-broadcasts is carried out automatically for all past programs, instead of for only one user-selected past program as disclosed in D2.

The skilled person would not have arrived at this feature starting from D2 for the following reasons.

D2 merely discloses that a user may manually select one listing of a past program, which enables a search for a re-broadcast of the selected program to be carried out (see column 28, lines 46 to 51 of D2). If the user were to manually initiate another search for a different program, the information regarding the first search would be lost and a new search would be carried out. There is no mechanism in the system of D2 for compiling information regarding more than one program.

Furthermore, if the system of D2 were to be adapted to compile this information, it would still not have been used in the manner as claimed in the present application. As has been discussed above, D2 allows a search for re-broadcasts of one particular past program to be made, and either the listing of the re-broadcast (future) program is highlighted if it can already be seen in the guide, or a new screen is shown containing a dialogue box. If this functionality were to be implemented for all past programs, the result would be that various future listings would be highlighted (all programs that are repeats of any past program), or that a dialogue would be shown listing all future programs that are repeats.

Reasons for the Decision

1. The appeal is admissible.

Main request - inventive step (Article 56 EPC 1973)

2. Closest prior art

The appellant did not dispute that D2 represents the closest prior art and that it discloses the following features of claim 1:

A system for providing an electronic program guide for television or radio programs *(see paragraph [0001] of D2)* comprising:

means for receiving and storing downloaded program guide listings data for multiple channels *(see figure 2 and paragraph [0020]: the electronic program guide data*

are downloaded with the television programs, extracted and stored);

means for presenting on-screen a selection of currently stored listings of programs from the downloaded data that are currently being broadcast or programs that will start being broadcast in the future *(see paragraph [0048] and figures 17 and 18)*;

means for presenting on-screen some listings of programs from downloaded data that have finished being broadcast *(see paragraph [0048] and figures 17 and 18)*;

means for receiving a user selection from the on-screen listings of a program that has finished being broadcast *(see paragraphs [0049] and [0101])*; and

means for identifying in the currently stored listings data whether the program of the user selection is scheduled to start being re-broadcast again at a future time *(see paragraphs [0109] and [0110])*.

3. Distinguishing features

The appellant thus submitted that the system of claim 1 differs from the system of D2 by the remaining features of claim 1, which are the following ones:

(a) means for storing the user selection data if no re-broadcast of the program is identified in the listings data;

(b) means for subsequently receiving and storing downloaded further program guide listings data for multiple channels;

(c) means for comparing the user selection data with the subsequently downloaded listings data; and

(d) means for indicating, in the on-screen listings of programs that have finished being broadcast, that the program of the user selection is identified as

scheduled to start being re-broadcast again in the future.

As to feature (b), the board regards it as implicit in the disclosure of D2 that the system has means for receiving and storing downloaded further program guide listings data for multiple channels, because it is a standard feature of electronic program guide (EPG) systems that they receive further EPG data in order to keep the EPG data up-to-date. For instance, in order for the system to always be able to display EPG data for the next seven days, the system must regularly receive and store fresh EPG data. However, the appellant argued that feature (b) was novel because it specifies means which are suitable for "subsequently" carrying out steps after the means for storing have stored user selection data in feature (a), the latter not being disclosed in D2. However, such means would also be present for the standard feature of an EPG in D2, although these later listings data are not used for any comparison with a (previously) selected past program.

4. Objective technical problem

It is undisputed that distinguishing features (a) to (d) contribute, in combination with the other features of the claim, to the following technical effect: if no re-broadcast of the selected past program is identified in the listings data, the selection data is stored and later compared to subsequently downloaded listings data, enabling an indication to be made, on the on-screen listings of programs that have finished being broadcast, that a program previously selected by the user is identified as scheduled to start being re-broadcast again in the future.

Hence the objective technical problem can be formulated, without pointers to the solution, as "how to improve the functionality of the EPG regarding the re-broadcasting of programs".

The appellant did not dispute this formulation of the objective technical problem.

5. Obviousness

5.1 In D2, when a past program is selected by the user in the EPG and either a record button (see 45 in figure 4) or a watch button (see 44 in figure 4) on the remote control is depressed by the user, the system performs a search in the stored EPG data for future re-broadcasts of the selected past program (see paragraphs [0101] to [0110], in particular column 28, lines 49 to 51, and column 29, lines 8 to 11). If a future re-broadcast of the selected past program is found in the stored EPG data, the system programs either a timer-watching or timer-recording of the re-broadcast, depending on which of the watch or record button was depressed. Moreover, at least when the user depresses the record button, the system of D2 also informs the user in one of the following manners that a re-broadcast has been found (see column 27, lines 39 to 51, and column 29, lines 20 to 23):

(1) if the cell of the re-broadcast is present on the current EPG screen, the cell is highlighted on that screen; or

(2) if the cell of the re-broadcast is **not** present on the current EPG screen, a dialogue box is shown on-screen indicating the next time frame and the channel of the re-broadcast.

D2 thus explains in detail what happens if a re-broadcast is found for the past program selected for recording by the user.

However, D2 is silent on what happens if no future re-broadcast is found.

5.2 The appellant submitted that this is because D2 does not consider the situation in which no future re-broadcast is found worthy of consideration. Hence, the skilled person would have had no motivation to deal with it. Moreover, even if the skilled person did, either nothing would happen or the user would simply be informed that no future broadcast had been scheduled.

5.3 The board cannot share the appellant's view that the skilled person would pay no interest to what happens when the user selects for recording a past program for which no re-broadcast is found, merely because D2 is silent on this point. The skilled person, who is an average practitioner in the technical field of EPG systems, has no choice but to consider this situation when implementing a system according to D2 because the system must know what to do in such a situation. Since D2 is silent on this point, the skilled person must fill this information gap by using his/her common sense and common general knowledge.

The board agrees with the appellant that the two most straightforward solutions would be for the system either to do nothing (which the user might understand as meaning that no re-broadcast was found) or explicitly inform the user that no re-broadcast was found, e.g. by displaying an on-screen message.

However, the skilled person would also be well aware that the stored EPG data about future programs is, at any given time, limited to those which will be broadcast over a predetermined time period (typically one week) in the near future. The appellant did not dispute that this is a standard feature of EPG systems and that, as time passes, the EPG system must regularly receive further EPG data in order to always store up-to-date EPG data for the next week. It would thus have been apparent to the skilled person that the fact that no re-broadcast is found in the stored EPG data only means that there is no re-broadcast in the near future (e.g. next week), but says nothing about possible later re-broadcasts.

In view of this, the board regards it as obvious that the skilled person would want to extend this search for a re-broadcast further into the future in the system of D2. The implementation of such a function would be straightforward, i.e. storing the information that the user has shown interest in recording a re-broadcast of a past program and using this information to check whether a re-broadcast is present whenever updated EPG data is received, thereby arriving at **distinguishing features (a) to (c)** *supra*.

5.4 As a matter of course, the user must also be informed that a re-broadcast of the selected past program has been found.

In D2, as explained under point 5.1 *supra*, this information is conveyed to the user either by highlighting the future re-broadcast in the EPG screen or by displaying an on-screen message.

In the board's view, it is clear to the skilled person that there are other ways in which this information can be conveyed to the user, each having predictable advantages and disadvantages. For instance, highlighting the selected past program instead of the re-broadcast, or highlighting both the selected past program and the re-broadcast, are alternative options which the skilled person would regard as obvious ways of displaying this information.

Hence, the skilled person would also arrive without inventive step at **distinguishing feature (d)** *supra*.

5.5 As a result, the subject-matter of claim 1 according to the appellant's main request does not involve an inventive step in view of D2 and the skilled person's common general knowledge

6. Conclusion on the main request

Since the subject-matter of claim 1 according to the appellant's main request does not involve an inventive step (Article 56 EPC 1973), the main request is not allowable.

First and second auxiliary requests - inventive step

7. Claim 1 of the first auxiliary request differs from claim 1 of the main request only in that user selection of a past program is for "a function" for this program. Claim 1 of the second auxiliary request further adds that this function is "a watch or record function".

As explained under point 5.1 *supra*, these additional features are already present in the system of D2.

Hence, the reasoning under section 5 *supra* regarding the subject-matter of claim 1 according to the main request also applies to the subject-matter of claim 1 according to each of the first and second auxiliary requests.

Third to fifth auxiliary requests - inventive step

8. Claim 1 according to the third to fifth auxiliary requests substantially differ from claim 1 of the main request by the following additional features:
(e) **all** past programs in the stored EPG data, i.e. not only the user-selected past program, are checked to identify whether a future re-broadcast is scheduled (**third to fifth auxiliary requests**);
(f) for **all** past programs in the stored EPG data, i.e. not only for the user-selected past program, it is indicated, in the on-screen listings of past programs, which past programs are scheduled to be re-broadcast in the future (**third to fifth auxiliary requests**);
(g) user selection of a past program is for "a function" for this program (**fifth auxiliary request**); and
(h) user selection of a past program is for "a watch or record function" for this program (**fourth auxiliary request**).

9. As explained under section 5 *supra*, the board considers that it would have been obvious, starting from D2, to arrive at an EPG system according to claim 1 of the main request. Features (e) and (f) *supra* effectively add that a search for re-broadcasts is carried out automatically for **all** past programs, instead of for only one manually selected past program at a time as disclosed in D2, and that all the past programs which, as a result of this search, are found to be scheduled

to be re-broadcast are identified as such in the on-screen listings of past programs.

Features (e) and (f) are thus the result of mere automation of the manual procedure in D2 of selecting a past program in order to search for a future re-broadcast and display on-screen the results of the search. In the board's view, such automation only had predictable advantages and disadvantages such as increasing the user's convenience, but at a cost of increasing the complexity of the system. The board's observations, under point 5.4 *supra*, regarding the various manners in which the information about the presence/absence of a re-broadcast of one user-selected past program can be conveyed to the user also apply to the situation in which this information concerns all past programs.

Features (g) and (h) have already been dealt with under point 7 *supra*.

Hence features (e) to (h) do not render the subject-matter of claim 1 inventive.

For the above reasons, the subject-matter of claim 1 according to each of the third to fifth auxiliary requests does not involve an inventive step in view of D2 and the skilled person's common general knowledge.

Conclusion

10. Since none of the appellant's requests is allowable, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

K. Boelicke F. Edlinger

Decision electronically authenticated