Datasheet for the decision of 1 December 2011

Case Number: T 1719/07 - 3.5.04
Application Number: 01901553.6
Publication Number: 1253782
IPC: H04N5/445
Language of the proceedings: EN
Title of invention: ELECTRONIC PROGRAM GUIDE DISPLAY CONTROLLER
Applicant: Sharp Kabushiki Kaisha
Headword:
Relevant legal provisions:
EPC 1973 Art. 56, 84
EPC Art. 123(2)
Keyword:
Inventive step (main request) - yes
Decisions cited:

Catchword:
DECISION
of the Technical Board of Appeal 3.5.04
of 1 December 2011

Appellant: Sharp Kabushiki Kaisha
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Composition of the Board:
Chairman: C. Kunzelmann
Members: R. Gerdes
B. Müller
Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse European patent application No. 01901553.6.

II. The application was refused because the subject-matter according to the claims of the applicant's main request and the first to fifth auxiliary requests was found to not meet the requirements of Articles 56, 84 and 123(2) EPC 1973. The finding of lack of inventive step was based on the following documents:

D1: US 5 479 268 A
D2: US 5 990 883 A
D3: US 5 266 932 A

III. The applicant appealed and submitted claims of a new main request as well as of new first to fifth auxiliary requests together with the statement setting out the grounds of appeal. Oral proceedings were requested as an auxiliary measure.

IV. In a communication annexed to a summons to oral proceedings, the board indicated that according to its provisional opinion the claims filed with the statement of grounds of appeal did not contravene Article 123(2) EPC, and that the subject-matter of claim 1 according to the main request appeared to involve an inventive step (Article 56 EPC 1973). The board, however, noted that the claims of the main request appeared not to conform to Article 84 EPC 1973.

V. With a response letter dated 25 August 2011, the appellant filed new claims 1 to 14 according to a main request as well as claims of first to fifth auxiliary
requests. The appellant expressed an interest in avoiding the need for the oral proceedings and consented to the remittal of the case to the first instance should the board come to the conclusion that the decision under appeal was to be set aside in view of the requests.

VI. The appellant was informed by fax of 13 September 2011 that the oral proceedings were cancelled.

VII. Claim 1 of the main request reads as follows (amendments compared with claim 1 of the main request on which the decision under appeal was based have been highlighted by the board using the "strikethrough" effect for passages deleted and "underlined" effects for new or amended passages).

"An electronic program guide display control apparatus comprising:
storage means (13) for storing program information for each of a plurality of information providing systems;
integration means (16) for creating an electronic program chart by selectively integrating program information stored in the storage means (13), said electronic program chart comprising a plurality of lines; and
display means (17) for displaying the electronic program chart created by the integration means (16), wherein the electronic program guide display control apparatus comprises a display item number determination means (18) whereby, regarding the data for a single screen of the electronic program chart created by the integration means (16), the number of display items from each of the information providing systems that are simultaneously displayed on the single screen is determined by comparing based on the ratio of the
number of items of each of the information providing systems, or by the designation of a display ratio entered by a user about the ratio of numbers of display items,
wherein the display item number determination means ensures a minimum unit of display area corresponding to an of one line of the electronic program chart to each information providing system even when the display item number determined for that a given information providing system based on the ratio of the display item numbers is less than one."

Claims 2 to 14 are dependent on claim 1.

VIII. In its decision refusing the application the examining division argued as follows with respect to lack of inventive step (Article 56 EPC 1973) of the subject-matter of claim 1 of the main request underlying the decision under appeal.

The subject-matter of claim 1 differed from the apparatus disclosed in document D1 only in that "the display item number determination means ensures a minimum unit of display area corresponding to an information providing system even when the display item number determined for that information providing system based on the ratio of the display item numbers is less than one".

Therefore, the technical problem which was solved by the invention might be regarded as "preventing the possibility of the program data for a particular system not being displayed on the integrated EPG screen at all". This problem was known to the skilled person, "since a user should be informed at first sight about the content of all the video sources". Document D2
disclosed the above feature and provided the same advantages. The skilled person would therefore have included the feature of D2 in D1. Hence, the subject-matter of claim 1 according to the main request lacked inventive step.

Furthermore, the examining division found that claim 1 lacked clarity (see Article 84 EPC 1973). Claim 1 was found to comprise a contradiction because according to its last feature the display item number was determined to be one when it was determined to be less than one.

Moreover, the examining division found that the last feature of claim 1 referred to an unspecified minimum unit of display area. This was found to be an undisclosed generalisation of the feature relating to the minimum unit of display area of one line disclosed in the application as filed (see Article 123(2) EPC).

The appellant argued in the statement setting out the grounds of appeal that the objections under Articles 84 and 123(2) EPC 1973 of the decision under appeal at least did not apply to claim 1 of the present main request.

With respect to the ground of lack of inventive step the appellant stated that D1 did not show or suggest the last feature of claim 1 relating to the display of a minimum of one line for each information providing system. It also did not show a preset or user defined ratio to create the electronic program guide. Furthermore, neither D1 nor D2 showed a determination means based on the ratio of the display items from each of the information providing systems. The problem defined in the decision under appeal "preventing the possibility of the program data for a particular system
not being displayed on the integrated EPG screen at all" was based on hindsight.

X. The appellant requested that the decision under appeal be set aside and that the proceedings continue based on the requests filed with the letter dated 25 August 2011.

Reasons for the Decision

1. The appeal is admissible.

2. Main request: Article 123(2) EPC

The board is satisfied that the amendments to claim 1 made in appeal proceedings are based on the disclosure of page 16, lines 12 to 25 and figure 3, step S8 to S11. The amendment of the last feature of claim 1 overcomes the ground for refusal under Article 123(2) EPC (see point VIII above). Furthermore, the board sees no other objection under Article 123(2) EPC.

3. Main request: Article 84 EPC 1973

3.1 The last feature of the amended claim 1 reads "... the display item number determination means ensures a minimum of one line of the electronic program chart to each information providing system, even when the display item number determined for a given information providing system based on the ratio of the display item numbers is less than one".

3.2 The board understands this feature in its context such that for each information providing system a display item number is determined. If this determination yields
a result which is less than one, at least one line of
the electronic program chart displays a display item
from the information providing system. In particular,
the display item number is based on the ratio specified
in lines 15 to 17 of claim 1, but subject to the
provision that at least one line is reserved for each
information providing system, as specified in the last
feature of claim 1. The board holds that this
determination is not contradictory. The employed
formulation specifies how the number of display items
is determined in general. It also unambiguously
expresses that - for the special case of a ratio
smaller than one - one line is allocated to each
information providing system.

3.3 Hence, the board is satisfied that claim 1 meets the
requirement of clarity laid down in Article 84
EPC 1973. Furthermore, the board sees no other
objection under Article 84 EPC 1973 against the wording
of the present claims.

4. **Main request: Article 56 EPC 1973**

4.1 It is common ground that D1 constitutes the closest
prior art with respect to the claimed subject-matter.

D1 shows an electronic program guide (EPG) display
control apparatus (see figure 22a: 180) comprising
storage means (232, 234, 238) for storing program
information for each of a plurality of information
providing systems (201, 205). It also discloses
integration means for creating an electronic program
chart comprising a plurality of lines (column 6,
lines 55 to 63, and, for instance, figures 1 to 3). The
electronic program chart is displayed on display means
(210).
Like the present application, D1 is based on the recognition of the problem that the size and the resolution of the television display limit the amount of channels that can be displayed simultaneously (see column 2, lines 23 to 28). Moreover, D1 recognises "a need to order the display of information most conveniently for the user" (see column 2, lines 28 to 31). In order to solve this problem D1 proposes a "channel customization screen" (figure 20: 116). On this screen a limited number of favourite channels can be selected from broadcast stations and cable services (column 12, lines 8 to 22). These favourite channels are displayed with the selected broadcast stations "listed first in numerical order" (column 12, lines 15 to 18). The favourite cable services are listed below the broadcast stations.

4.2 D1 fails to disclose the following features of claim 1.

4.2.1 The display item number determination means as defined in claim 1 is not shown in D1. According to claim 1 these means are adapted to determine the number of display items from each of the information providing systems that are simultaneously displayed on a single screen. The determination is based on the ratio of the number of items of each of the information providing systems, or alternatively determined "by designation by a user about the ratio of numbers of display items".

Determination of a number of display items based on a ratio is not shown in D1. In its decision the examining division referred to figure 20 and column 6, lines 61 to 63, column 2, lines 51 to 53, column 12, lines 13 to 17 to show that corresponding features of claim 1 of the then main request were shown in D1. These passages
refer to the selection of favourite channels in figure 20 and the display of a channel grid based on this selection (see, for instance, figures 1 to 3). It is correct that the channels are displayed ordered according to information providing systems. In the example illustrated in figures 1 to 3, broadcast stations are displayed in an upper part of the EPG and cable services in a lower part of the EPG. D1, however, neither discloses a user option to set a ratio of display item numbers nor any determination of the number of display items based on a ratio of the number of items of each of the information providing systems.

4.2.2 D1 also does not show the last feature of claim 1 according to which "the display item number determination means ensures a minimum of one line of the electronic program chart to each information providing system, even when the display item number determined for a given information providing system based on the ratio of the display item numbers is less than one".

4.3 The distinguishing features allow displaying program information from a plurality of information providing systems in an integrated manner such that programs are displayed with a proper ratio between the individual information providing systems (see description of the application, page 4, last paragraph). Furthermore, the minimum of one display line per information providing system avoids a situation where an information providing system is "not being displayed on the integrated EPG screen at all" (see description of the application, page 16, lines 20 to 25).

4.4 The formulation of the problem in the decision under appeal "preventing the possibility of the program data
for a particular system not being displayed on the integrated EPG screen at all" (see decision under appeal, section 3) is related only to a part of the features distinguishing claim 1 of the application from D1 (see point 4.2.1 above) and hence is not the appropriate formulation of the objective problem.

There is no indication in the cited prior art, that program data for an information providing system may not be displayed as a consequence of an automatic allocation of display lines in the display item number determining means. In addition, none of the documents on file discloses or hints at the fact that it may be desirable to allocate space on the display in dependence on the ratio of the number of display items supplied by each information providing system, let alone to always display at least one line of program information from each information providing system.

The board concludes that the objective technical problem, therefore, has to be defined as how to optimise the number of display items from each of the information providing systems which are simultaneously displayed so as to improve ease of use.

4.5 Document D2 discloses an integrated database containing programming data for a plurality of different program environments or physical sources such as antenna, cable or the internet (see figure 1 and column 2, lines 8 to 18 and lines 51 to 59). The program information from this database is presented to the user in an EPG which shows a listing of database entries categorised or sorted by broadcast time or other selectable attributes (see figure 3 and column 4, lines 1 to 17 and lines 51 to 54). D2 proposes to display content entries "regardless of their signal source" (see column 11,
lines 56 to 61). A display method which disregards the signal source information is, however, contrary to what the present application proposes. This is illustrated by the fact that the display control apparatus according to claim 1 of the present application displays at least one program item from each source. Hence, even though D2 concerns a similar technical problem, i.e. to provide an integrated electronic programming guide improving ease of use (see column 1, line 65 to column 2, line 17), the solution which is proposed in this document diverges from the one of the present application. In other words, D2 does not show or hint at the specific solution of the above technical problem, which is presented in the application.

4.6 The examining division argued that it was obvious that "the EPG display device would edit an introduction screen describing all the different types of signals ... so that the user avoids the risk of missing any favourite program" and that "a user should be informed at first sight about the content of all video sources" (see decision under appeal, point 3.1, second paragraph).

The board agrees that it was obvious from D1 that the user should not miss any favourite program. This implies that all favourite channels should be displayed by the EPG. There is, however, no interrelation between displaying all favourite channels and displaying at least one channel from every information source. D1 and D2 address the desire to inform the user in an integrated EPG about the content of the user's favourite channels. According to D2 providing an integrated EPG meeting this goal even means that the user need not be concerned with the physical signal source and that the physical source need not be
displayed (see D2, column 5, lines 30 to 39 and column 11, lines 56 to 61). Hence, the board is unable to discern an indication in any of the cited documents why the user should be informed at first sight about content of all video sources.

4.7 Document D3 refers to a vertical scrolling address generating device for a multiple image plane display system. It is not concerned with the display of an EPG integrating program information from multiple information providing systems.

4.8 Summarising the above, neither one of documents D1 to D3 shows display item number determination means in the sense of claim 1 nor a minimum of one line of the electronic program chart allocated to each information providing system. As a result, even if the skilled person combined the teachings of these documents, he/she would not arrive at the subject-matter of claim 1 in an obvious manner. The board, therefore, finds that the subject-matter of claim 1 involves an inventive step (Article 56 EPC 1973). The further claims 2 to 14 are dependent on claim 1. Their subject-matter, therefore, also involves an inventive step.

5. In view of the above, the decision under appeal is to be set aside. Since the subject-matter of the claims of the main request is found to meet the requirements of the EPC, there is no need to consider the auxiliary requests.

6. The board sees no obstacle to the grant of a patent on the basis of the present claims. However, the adaptation of the description, if necessary, as well as the grant formalities still need to be carried out. In view of the decision under appeal, which did not
discuss the issue of conformity to the description, and the appellant's request, the board considers it appropriate to remit the case to the first instance for grant of a patent with a description to be adapted.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to grant a patent with the following claims and a description to be adapted:

   Claims 1 to 14 according to the main request submitted with the letter of 25 August 2011.

The Registrar: The Chairman:

K. Boelicke C. Kunzelmann

Decision electronically authenticated