Datasheet for the decision
of 17 October 2018

Case Number: T 1568/13 - 3.5.04
Application Number: 99902737.8
Publication Number: 0990347
IPC: H04N7/173
Language of the proceedings: EN

Title of invention:
Digital television system which selects images for display in a video sequence

Applicant:
Koninklijke Philips N.V.

Headword:

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - (no)

Decisions cited:
Catchword:
Case Number: T 1568/13 - 3.5.04

DECISION
of Technical Board of Appeal 3.5.04
of 17 October 2018

Appellant: Koninklijke Philips N.V.
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 27 February 2013 refusing European patent application No. 99902737.8 pursuant to Article 97(2) EPC.

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

I. The appeal is against the decision to refuse European patent application No. 99 902 737.8, published as international application WO 99/55091 A1.

II. The examining division refused the patent application on the grounds that the subject-matter of the independent claims of the sole request lacked inventive step in view of the combination of documents:

D5: WO 96/37075 A1 and

III. The applicant filed notice of appeal against this decision and with its statement of grounds of appeal submitted claims of a new main request and first to fifth auxiliary requests.

IV. The board issued a summons to oral proceedings stating that it considered the subject-matter of claim 1 of all the appellant's requests as lacking inventive step.

The board made the following observations:

"Main request
Inventive step, Article 56 EPC 1973

3. Claim 1 of the main request corresponds to claim 1 of the sole request underlying the decision under appeal except that it was partially reworded and the two-part form corrected in view of D5 as the closest prior art.

3.1 It seems to be common ground, that D5 discloses all features of claim 1 except for the insertion of a
selected image into an image of the video sequence (see statement of grounds, point 1.2.4 and decision under appeal, points 13.1 and 13.1.1).

3.2 The appellant argued that the distinguishing feature had the effect that the viewer was simultaneously confronted with the video sequence and the selected image. The viewer was reluctant to change channels when confronted with the advertisement because the advertisement was integrated into the program which was currently watched by the viewer. The objective technical problem was therefore [how to avoid] 'that the viewer when confronted with (personalized) advertisements switches to a different channel' (see statement of grounds, point 1.3.1).

3.3 At present the board is not convinced by this reasoning.

Displaying advertisements or 'product placement' serves a commercial purpose. Hence, the problem that the viewer - when confronted with an advertisement - switches to a different channel is a commercial problem which essentially concerns a person active in the marketing of products. This person may come up with a requirement for a person skilled in the field of digital television such as continuing to display the program currently watched by the viewer and displaying the selected advertisement at the same time. Hence, the objective technical problem would be how to technically realise a digital television displaying the program currently watched and displaying a selected advertisement at the same time.

3.4 Independently of whether the technical problem is formulated as proposed by the appellant or as set
out above, the board is inclined to follow the reasoning in the decision under appeal that a solution to those technical problems was disclosed in D1 and the skilled person would have readily adopted that solution (see Reasons, section 13.1).

3.5 With respect to the appellant's argument A (see statement of grounds, points 1.3.2 and 1.3.3) the board agrees that D5 neither explicitly nor implicitly discloses the possibility of inserting profile dependent image material into one of the video sequence images. However, this feature is explicitly disclosed in D1 (see column 9, lines 3 to 16).

3.6 Regarding argument B (see statement of grounds, points 1.3.4 and 1.3.5) the board agrees that D5 teaches that seamless switching between channels is desirable. However, it is not understood why seamless switching should teach away from simultaneous display of several video signals.

3.7 Argument C is understood such that starting from D5 the skilled person would prevent user selection of channels during advertisements. Therefore, there was no need to insert advertisements into the program currently being watched. The board considers preventing user selection of other channels as unrealistic, since users would not accept to be blocked from selecting channels.

3.8 Argument D seems to be based on the fact that D1 discloses inserting advertisements using a mixer, whereas in D5 a selector is used for switching between channels. According to the appellant the combination of D5 and D1 would require that the selector were exchanged against a mixer as in D1. At present the
board disagrees with this argument. It seems that starting from D5 the skilled person would not want to lose the functionality of being able to select different channels. He or she would therefore be motivated to incorporate the additional functionality of the mixer into the selector.

3.9 The appellant contends that the effects due to 'simultaneous display of the advertisement with the image of the video sequence' and the image being 'selected on the basis of the personal profile' reinforce each other such that the viewer appreciates the simultaneous display of the advertisement and the program (Argument E). At present the board agrees that the two measures provide similar effects which both may lead to increased user satisfaction with the displayed content, but there seems to be no synergy between the measures. Instead, they seem to independently contribute to increased user satisfaction with the displayed content. In addition, it is noted that the effect of increased user satisfaction is a commercial one.

3.10 It follows that the subject-matter of claim 1 lacks an inventive step in view of D5 in combination with D1.

3.11 The board also notes that PIP (picture-in-picture) windows are well known in the technical field of digital television. Hence, it appears that independently of D1 the skilled person would have considered using a PIP window to continue displaying the film and the advertisement at the same time. The appellant should therefore also be prepared to discuss inventive step on the basis of D5 and the common general knowledge of the skilled person.
First auxiliary request
Inventive step, Article 56 EPC 1973

4. Claim 1 of the first auxiliary request contains the following additional feature: 'each alternative image having additional information associated therewith, the additional information associated with each alternative image corresponding to information stored in a user profile of the digital television'.

In addition, it specifies that the alternative images have 'associated therewith information which can be correlated with' information stored in the user profile.

4.1 It appears that these features are disclosed in D5, see page 4, lines 2 and 3 together with page 11, lines 12 to 19.

4.2 The appellant did not argue that the additional features were not disclosed in D5. Hence, the reasoning regarding inventive step of claim 1 of the main request applies.

Second auxiliary request
Inventive step, Article 56 EPC 1973

5. Claim 1 of the second auxiliary request additionally specifies that the controller is adapted for receiving 'control data included in a data packet for each alternative image'. It also includes the feature of claim 2 of the first auxiliary request.

5.1 It appears that D5 discloses the use of control data/commands that are supplied together with the video
signals (see page 11, lines 12 to 19). D1 discloses 'commercial insertion coordinates on the monitor screen' (see column 9, lines 10 to 16). It is not disclosed that the commands are included in data packets for each alternative image and that the control data are provided to a display processor.

5.2 The appellant did not provide arguments regarding inventive step based on the differences relating to the data packets and the provision of the control data to the display processor. The board regards them as mere implementation details which the skilled person would have selected as required according to the circumstances.

5.3 The appellant's arguments relating to the insertion position of the alternative image are not convincing, because this feature is disclosed in D1 (see point 5.1 above). The alleged effect adduced by the appellant ('select a position for the inserted image where it is the least disturbing', see statement of grounds, point III.3) cannot support its reasoning regarding inventive step because there seems to be no support for such an effect in the description. The effect is only subjective and there is no feature in the claim specifying such a positioning.

5.4 Hence, at present the board has doubts that the subject-matter of claim 1 of the second auxiliary request involves an inventive step.

Third auxiliary request
Inventive step, Article 56 EPC 1973

6. Claim 1 of the third auxiliary request corresponds to claim 1 of the first auxiliary request
with the additional feature of 'the display processor therewith using image attributes, chroma-keying methods and region-object substituting methods.'

6.1 At present the board considers this feature to only relate to well-known methods of image coding, which the skilled person would have employed for reasons of compatibility with image transmission standards.

6.2 Hence, at present the board has doubts that the subject-matter of claim 1 of the third auxiliary request involves an inventive step.

Fourth auxiliary request
Inventive step, Article 56 EPC 1973

7. Claim 1 of the fourth auxiliary request contains the combined features of claims 1 and 2 of the third auxiliary request. Regarding the additional feature of claim 2 the same observations as those made with respect to claim 1 of the second auxiliary request apply (see point 5.3 above).

Fifth auxiliary request
Inventive step, Article 56 EPC 1973

8. Claim 1 of the fifth auxiliary request contains the additional feature of 'the control data including screen placement coordinates, scaling and timing information and presentation attributes.'

D1 discloses that the control data contain insertion coordinates. The index of D1 seems to correspond to timing information, since it defines the insertion point in the video sequence. D1 does not refer to
scaling information. However, the board regards it as common general knowledge that PIP windows may be specified with scaling information.

Hence, claim 1 of the fifth auxiliary request seems to lack an inventive step."

V. The appellant did not reply to the summons.

VI. Oral proceedings were held on 17 October 2018. As announced beforehand the appellant was not represented at them.

The Chairman noted that the appellant had requested in writing that the decision under appeal be set aside and that a European patent be granted on the basis of the claims of the main request or, in the alternative, one of the first to fifth auxiliary requests, all requests filed with the statement of grounds of appeal.

VII. Claim 1 of the main request reads as follows:

"A digital television system (2) comprising:

a memory (22,24) for storing a user profile and computer-executable process steps;
a display processor (12) for receiving video data, and which outputs the video data as a video sequence of images; and
a controller (19) for receiving video data comprising at least two alternative images, wherein the controller (19) executes the process steps stored in the memory so as (i) to select one of the alternative images based on information stored in the user profile, and (ii) to cause the display processor to insert the selected one of the alternative images
within the video sequence, characterized in that the
selected one of the alternative images is inserted
within an image of the video sequence."

VIII. Claim 1 of the first auxiliary request reads as follows
(amendments to claim 1 of the main request are
underlined, deletions are marked by strike-through):

"A digital television system (2) comprising:

a memory (22,24) for storing a user profile and
computer-executable process steps;
a display processor (12) for receiving video data, and
which outputs the video data as a video sequence of
images; and
a controller (19) for receiving video data comprising
at least two alternative images,
each alternative image having additional information
associated therewith, the additional information
associated with each alternative image corresponding to
information stored in a user profile of the digital
television,
wherein the controller (19) executes the process steps
stored in the memory so as (i) to select one of the
alternative images having associated therewith
information which can be correlated with based on
information stored in the user profile, and (ii) to
cause the display processor to insert the selected one
of the alternative images within the video sequence,
characterized in that the selected one of the
alternative images is inserted within an image of the
video sequence."

IX. Claim 1 of the second auxiliary request corresponds to
claim 1 of the first auxiliary request with the feature
relating to the controller (19) being amended as follows:

"... a controller (19) for receiving video data comprising at least two alternative images as well as control data included in a data packet for each alternative image, ..."

and the following feature which was appended to claim 1:

"... and in that the controller (19) provides the control data to the display processor (12), the control data comprising information when and where the selected one of the alternative images is to be inserted in the video sequence of images."

X. Claim 1 of the third auxiliary request reads as follows:

"A digital television system (2) comprising:
a memory (22,24) for storing a user profile and computer-executable process steps;
a display processor (12) for receiving video data, and which outputs the video data as a video sequence of images; and
a controller (19) for receiving video data comprising at least two alternative images, each alternative image having additional information associated therewith, the additional information associated with each alternative image corresponding to information stored in a user profile of the digital television, characterized in that the controller (19) executes the process steps stored in the memory so as (i) to select one of the alternative images having associated therewith information which can be correlated with
information stored in the user profile, and (ii) to cause the display processor to insert the selected one of the alternative images within an image of the video sequence, the display processor therewith using image attributes, chroma-keying methods and region-object substituting methods."

XI. Claim 1 of the fourth auxiliary request corresponds to claim 1 of the third auxiliary request with the following feature appended to it:

"..., wherein the controller (12) provides control data to the display processor (12), the control data comprising information when and where the selected one of the alternative images is to be inserted in the video sequence of images."  

XII. Claim 1 of the fifth auxiliary request corresponds to claim 1 of the fourth auxiliary request with the following feature appended to it:

"..., the control data including screen placement coordinates, scaling and timing information and presentation attributes."

Reasons for the Decision

1. The appeal is admissible.

2. In the communication annexed to the summons to oral proceedings, the board expressed its view that the subject-matter of claim 1 of all current requests lacked inventive step (see point IV above).
3. The appellant neither attempted to rebut the board's provisional opinion, nor submitted any new requests aimed at overcoming the objections. Despite a re-assessment of the case at the oral proceedings the board sees no reason to change its preliminary opinion, which therefore becomes final.

4. It follows that the decision under appeal cannot be set aside.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: 

C. Moser

The Chairman: 

C. Kunzelmann

Decision electronically authenticated