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**Datasheet for the decision
of 8 February 2023**

Case Number: T 1553/18 - 3.5.04

Application Number: 14160140.1

Publication Number: 2779673

IPC: H04N21/426, H04N21/81,
H04N21/438

Language of the proceedings: EN

Title of invention:

Broadcast content resume reminder

Applicant:

DISH Technologies L.L.C.

Headword:

Relevant legal provisions:

EPC Art. 56
RPBA 2020 Art. 13(2)

Keyword:

Inventive step - main request (no) - first auxiliary request
(no) - second auxiliary request (no)
Second auxiliary request - amendment after summons -
exceptional circumstances (yes)

Decisions cited:

Catchword:



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Case Number: T 1553/18 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 8 February 2023

Appellant: DISH Technologies L.L.C.
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 30 January 2018
refusing European patent application
No. 14160140.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair B. Willems
Members: A. Seeger
B. Müller

Summary of Facts and Submissions

I. The appeal is against the examining division's decision to refuse European patent application No. 14 160 140.1, published as EP 2 779 673 A1.

II. The prior-art documents cited in the decision under appeal included the following:

D4: US 2005/0132398 A1

III. The decision under appeal was based on the grounds that the subject-matter of the independent claims of the main request and the first and second auxiliary requests then on file lacked inventive step within the meaning of Article 56 EPC.

IV. The applicant (appellant) filed notice of appeal. With the statement of grounds of appeal, the appellant filed claims according to a main request and first and second auxiliary requests and submitted that the claims of these requests were identical to the claims of the corresponding requests on which the decision under appeal was based.

V. The board issued summons to oral proceedings and a communication under Article 15(1) of the Rules of Procedure of the Boards of Appeal in the 2020 version (RPBA 2020, see OJ EPO 2021, A35). In this communication, it introduced the following documents into the appeal proceedings:

D5: US 2007/0157235 A1

D6: US 8,209,713 B1

D7: US 2004/0015999 A1

It gave the following preliminary opinion.

- (a) The subject-matter of claim 1 of the main request lacked inventive step in view of the disclosures of documents D5 and D4 or documents D5 and D7 and common general knowledge (Article 56 EPC).
- (b) The subject-matter of claim 1 of the first and second auxiliary requests lacked inventive step in view of the disclosures of documents D5, D4 and D6 or documents D5, D7 and D6 and common general knowledge (Article 56 EPC).

VI. By letter dated 6 January 2023, the appellant filed amended claims of an "updated second auxiliary request" and indicated a basis for the amendments in the application as filed. It provided reasons to support its opinion that the claims of all requests met the requirements of Articles 54 and 56 EPC.

VII. The board held oral proceedings on 8 February 2023.

During the oral proceedings, the appellant confirmed that the second auxiliary request filed with the statement of grounds of appeal was withdrawn and that the "updated second auxiliary request" filed with the letter dated 6 January 2023 was its second auxiliary request.

The appellant's final requests were 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 filed with the statement of grounds of appeal or,

alternatively, on the basis of the claims of the first auxiliary request filed with the statement of grounds of appeal, or the second auxiliary request filed with the letter dated 6 January 2023.

At the end of the oral proceedings, the Chair announced the board's decision.

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

"A computer-implemented method, comprising:
identifying, by a television receiver (110, 112a, 112b), user-interest in particular broadcast programming (502);
detecting, by the television receiver (110, 112a, 112b) during a commercial break, a channel change event from a channel associated with the particular broadcast programming to a different channel (504);
in response to detection of the channel change event, monitoring, by the television receiver (110, 112a, 112b), status of the commercial break (506), wherein the monitoring of the status of the commercial break includes detection of timing information within a broadcast data stream of the channel associated with the particular broadcast programming;
determining, by the television receiver (110, 112a, 112b), prior to the ending of the commercial break, an upcoming ending time for the commercial break, based on the timing information;
determining, by the television receiver (110, 112a, 112b), and based on the timing information, a time for outputting an interface indicating the upcoming ending of the commercial break;
outputting, by the television receiver (110, 112a, 112b) for presentation by a display device (114a, 114b, 114c), the interface (208) that indicates the upcoming

ending of the commercial break (508) at the determined time for outputting the interface, wherein the interface (208) that indicates the upcoming ending of the commercial break is output at a predetermined and configurable time prior to ending of the commercial break; and

outputting, by the television receiver (110, 112a, 112b) for presentation by the display device (114a, 114b, 114c), the particular broadcast programming when an indication of user-selection of a particular icon (210) within the interface (208) is detected by the television receiver (510)."

- IX. Claim 1 of the first auxiliary request reads as follows (features added compared with claim 1 of the main request are underlined):

"A computer-implemented method, comprising:
identifying, by a television receiver (110, 112a, 112b), user-interest in particular broadcast programming (502), wherein identifying the user-interest in the particular broadcast programming (508) includes detecting output of the particular broadcast programming to the display device (114a, 114b, 114c) for a predetermined and configurable time period;
detecting, by the television receiver (110, 112a, 112b) during a commercial break, a channel change event from a channel associated with the particular broadcast programming to a different channel (504);
in response to detection of the channel change event, monitoring, by the television receiver (110, 112a, 112b), status of the commercial break (506), wherein the monitoring of the status of the commercial break includes detection of timing information within a broadcast data stream of the channel associated with the particular broadcast programming;

determining, by the television receiver (110, 112a, 112b), prior to the ending of the commercial break, an upcoming ending time for the commercial break, based on the timing information;

determining, by the television receiver (110, 112a, 112b), and based on the timing information, a time for outputting an interface indicating the upcoming ending of the commercial break;

outputting, by the television receiver (110, 112a, 112b) for presentation by a display device (114a, 114b, 114c), the interface (208) that indicates the upcoming ending of the commercial break (508) at the determined time for outputting the interface, wherein the interface (208) that indicates the upcoming ending of the commercial break is output at a predetermined and configurable time prior to ending of the commercial break; and

outputting, by the television receiver (110, 112a, 112b) for presentation by the display device (114a, 114b, 114c), the particular broadcast programming when an indication of user-selection of a particular icon (210) within the interface (208) is detected by the television receiver (510)."

- X. Claim 1 of the second auxiliary request reads as follows (features added compared with claim 1 of the main request are underlined and deleted features are ~~struck through~~):

"A computer-implemented method, comprising:
identifying, by a television receiver (110, 112a, 112b), user-interest in particular broadcast programming (502), wherein identifying the user-interest in the particular broadcast programming (508) includes detecting output of the particular broadcast

programming to the display device (114a, 114b, 114c)
for a predetermined and configurable time period;
in response to the identifying, detecting, by the
television receiver (110, 112a, 112b) during a
commercial break, a channel change event from a channel
associated with the particular broadcast programming to
a different channel (504), wherein the channel change
event includes: counting the number of detected channel
changes within a predetermined period of time,
comparing the number of detected channel changes to a
predetermined non-zero threshold, and determining that
the user has entered into a surf mode when the number
of detected channel changes is greater than the non-
zero predetermined threshold;
~~in response to detection of the channel change event~~
determining that the user has entered into surf mode,
monitoring, by the television receiver (110, 112a,
112b), status of the commercial break (506), wherein
the monitoring of the status of the commercial break
includes detection of timing information within a
broadcast data stream of the channel associated with
the particular broadcast programming;
determining, by the television receiver (110, 112a,
112b), prior to the ending of the commercial break, an
upcoming ending time for the commercial break, based on
the timing information;
determining, by the television receiver (110, 112a,
112b), and based on the timing information, a time for
outputting an interface indicating the upcoming ending
of the commercial break;
outputting, by the television receiver (110, 112a,
112b) for presentation by a display device (114a, 114b,
114c), the interface (208) that indicates the upcoming
ending of the commercial break (508) at the determined
time for outputting the interface, wherein the
interface (208) that indicates the upcoming ending of

the commercial break is output at a predetermined and configurable time prior to ending of the commercial break; and
outputting, by the television receiver (110, 112a, 112b) for presentation by the display device (114a, 114b, 114c), the particular broadcast programming when an indication of user-selection of a particular icon (210) within the interface (208) is detected by the television receiver (510)."

XI. The appellant's arguments relevant to the present decision may be summarised as follows.

Main request

- (a) Claim 1 did not address an aim in a non-technical field but in the technical field of multi-channel video players, i.e. set-top boxes. All features should have been considered to have technical character contributing to inventive step.
- (b) The subject-matter of claim 1 did not relate to a method of doing business, i.e. obtaining revenues for the insertion of commercial breaks. The method defined in claim 1 set out a way to treat commercial breaks as they arrived as part of broadcast programming. In the method of claim 1, commercial breaks were simply another part of broadcast programming.
- (c) The formulation of the objective technical problem should not have included implementing an advance warning of the end of non-preferred programming, i.e. a commercial break. This aspect was not disclosed in any prior art, and the effect of the

monitoring and timing on the navigation was technical.

- (d) None of documents D4, D6 and D7 disclosed the use of metadata for switching between a commercial break and regular broadcast programming. Furthermore, these documents related to video recording rather than receiving broadcast channels. Therefore, the person skilled in the art would have had no reason to consult any of these documents.

First auxiliary request

- (e) Identifying that a programme was preferred by a user and navigating back to that programme were not partial problems. Navigating back to that programme was only made possible by its prior identification.

Second auxiliary request

- (f) The claimed subject-matter required screening channels between the preferred channel serving as the start and end point, counting channel changes, and comparing the counted number to a non-zero threshold. This was nowhere disclosed in the prior art, and deriving it from document D5 entailed hindsight.
- (g) The board combined the disclosures of three documents (D5, D4 and D6) in a non-justifiable manner to conclude that the subject-matter of claim 1 of the second auxiliary request did not meet the requirements of Article 56 EPC.

Reasons for the Decision

1. The appeal is admissible.
2. Main request - inventive step (Article 56 EPC)
 - 2.1 Document D5 may be regarded as the closest prior art for the assessment of inventive step of the subject-matter of claim 1.
 - 2.2 Document D5 discloses a computer-implemented method, comprising:

identifying, by a television receiver, user-interest in particular broadcast programming (see paragraph [0045]: "*selection of the first channel is initiated by a user (e.g. selecting a television channel using a remote control, illustratively, RC 206). For example, a user may select the American Broadcast Corporation (ABC) channel conveying the television program 'Lost', where 'Lost' is selected as a preferred program*"; paragraph [0042]: "*data 274 includes preferred program information. For example, data 274 may include a list of preferred programs which, while selected for display using a display device, invoke the methodologies of the present invention*" and paragraph [0056]: "*At step 408, a program from the first programming stream is set as preferred program*")

detecting, by the television receiver during a commercial break, a channel change event from a channel associated with the particular broadcast programming to a different channel (see paragraph [0046]: "*At step 308, a first programming change event is detected on the first channel. ... In one embodiment, the first programming change event comprises a start of a programming interruption event. In one such embodiment, the programming interruption event includes*

commercials ... In continuation of the above example, 'Lost' is interrupted by a series of commercial advertisements" and paragraph [0047]: "At step 310, a switch between selection of the first channel and selection of second channel, where the second channel includes one of a plurality of other channels, is performed")

in response to detection of the channel change event, monitoring, by the television receiver, status of the commercial break (see paragraph [0048]: "At step 312, the first channel is monitored for a second programming change event. In one embodiment, the first programming stream associated with the first channel is monitored for the second programming change event"; Figure 4 and paragraphs [0056] and [0057]: "At step 414, the second channel conveying the second programming stream is selected (in response to the channel change event) ... At step 416, the first programming stream is monitored")

outputting, by the television receiver for presentation by a display device, the interface that indicates the ending of the commercial break (see paragraph [0054]: "in one embodiment, the present invention generates a programming notification in response to a programming change event (e.g., the end of a commercial interruption of a preferred program... The programming notification may be presented using at least one of a display device")

outputting, by the television receiver for presentation by the display device, the particular broadcast programming when an indication of user-selection of a particular icon within the interface is detected by the television receiver (see paragraph [0054]: "In one

embodiment, the programming notification provides the user a means (e.g., a selectable link displayed by the display device and actuated by a remote control) of manually switching to the television channel conveying the preferred program")

2.3 The subject-matter of claim 1 thus differs from the disclosure of document D5 in that the former specifies that:

(a) the monitoring of the status of the commercial break includes detection of timing information within a broadcast data stream of the channel associated with the particular broadcast programming

(b) determining, prior to the ending of the commercial break, an upcoming ending time for the commercial break, based on the timing information

(c) determining, based on the timing information, a time for outputting an interface indicating the upcoming ending of the commercial break and outputting the interface at this time

2.4 The effect of these distinguishing features is to provide an advance warning of the end of a commercial break so that a viewer has enough time to switch back to the preferred programming and does not miss any of it once the commercial break has ended (see description, page 4, lines 1 to 8).

2.5 However, in claim 1, a distinction between a "commercial break" and a piece of "particular broadcast programming" is not made by technical features.

From the perspective of a user, a piece of "particular broadcast programming" is something potentially interesting (see claim 1, lines 6 to 7). In contrast, users change channels during commercial breaks, i.e. try to avoid spending time watching them (see description, page 1, lines 27 to 28).

What users are interested in is a subjective non-technical aspect. Contrary to the above assumptions, some users may be more interested in new and nicely made commercials transmitted during a respective break than in regular broadcast programming.

Hence, to identify a transition point between a commercial break and the resumption of a particular broadcast programme serves a non-technical purpose, namely to maximise the time users spend watching content of interest to them.

The same holds for providing an advance warning of the end of a commercial break so that a user has enough time to switch back to the preferred programming and does not miss any of it once the commercial break has ended. This embodies the wish of a user not to miss any of the "particular broadcast programming" at the expense of watching the last moments of a commercial.

Hence, providing an advance warning of the end of a commercial break can be seen as an aim to be achieved in a non-technical field and may legitimately appear in the formulation of the objective technical problem (see Case Law of the Boards of Appeal of the European Patent Office, 10th edition 2022, I.D.9.2.6).

2.6 The appellant argued that none of the features in the claim were expressed as non-technical features and

that, as a result, all the features should have been considered to have technical character contributing to inventive step. The appellant submitted that the claim did not address an aim in a non-technical field. The claim addressed a problem in the technical field of multi-channel video players, i.e. set-top boxes, and provided a viewer with improved control of the video stream sent to the display (see point XI.(a) above).

The board is not convinced by these arguments. The board takes the view that in all the distinguishing features quoted under point 2.3 above, the term "commercial break" appears. As set out under point 2.5 above, this term and its distinction from a piece of "particular broadcast programming" is inherently non-technical because it is founded on the subjective judgement of a user that the particular broadcast programming is something not to be missed, while watching commercials during a respective break is to be avoided.

2.7 The appellant argued that the subject-matter of claim 1 did not relate to a method of doing business, i.e. obtaining revenues for the insertion of commercial breaks. The method defined in claim 1 set out a way to treat commercial breaks as they arrived as part of broadcast programming. In the method of claim 1, commercial breaks were simply another part of broadcast programming (see point XI.(b) above).

The board agrees that the subject-matter of claim 1 is not about obtaining revenues for the insertion of commercial breaks. However, the distinction between a "commercial break" and a piece of "particular broadcast programming" is non-technical as set out under point 2.5 above. To reflect this distinction in the

subsequent formulation of the objective technical problem, the board refers to a "particular broadcast programming" as preferred programming and to a "commercial break" as non-preferred programming.

- 2.8 The appellant argued that the board had wrongly applied the Comvik approach in that the aspect of an advance warning should not appear in the formulation of the objective technical problem. This aspect was not disclosed in any prior art, and the effect of the monitoring and timing on the navigation was technical. Instead, the objective technical problem should be formulated as how to provide an improved surf mode (see point XI.(c) above).

The board is not convinced by these arguments for the following reasons. The aim of providing an advance warning is from a non-technical field because it embodies the user's subjective preference to not miss any piece of preferred programming at the expense of watching the last moments of a piece of non-preferred programming. For the assessment of whether an aim to be achieved is from a non-technical field, the disclosure of the prior art is not relevant. Monitoring and navigation are indeed technical aspects. However, these are not part of the formulated effect but means to achieve it. The formulation of the objective technical problem proposed by the appellant is too general and does not reflect the effects of the distinguishing features set out in the description, page 4, lines 1 to 8.

- 2.9 Hence, the problem to be solved may be regarded as to implement an advance warning of the end of non-preferred programming so that a viewer has enough time to switch back to the preferred programming and does

not miss any of it once the non-preferred programming has ended.

2.10 The person skilled in the art would have understood that to implement an advance warning of the end of non-preferred programming, the end time of the non-preferred programming had to be identified before it was over. This could not be implemented by an analysis of audio-visual content of the non-preferred programming. Such an analysis could only identify a change from non-preferred programming to preferred programming after the change had happened. Hence, the person skilled in the art would have considered documents in which the end time of non-preferred programming is encoded as metadata, such as:

- (a) document D4, disclosing the use of metadata in a programme stream to identify a start and stop time of a commercial (see D4, paragraphs [0069], [0071] and [0073])
- (b) document D7, disclosing the use of segmentation messages in a programme stream to indicate that an advertising portion is about to end (see D7, paragraphs [0149] to [0151] and Figure 14)

2.11 The appellant argued that these documents disclosed metadata indicating start and end times of commercial breaks but used this metadata for a different purpose. Document D4 used this metadata to avoid commercial breaks where a fee was paid. Document D7 used this metadata to replace one commercial with another. None of these documents disclosed the use of metadata to switch between a commercial break and regular broadcast programming. Furthermore, these documents related to video recording, not to receiving broadcast channels.

Therefore, the person skilled in the art would have had no reason to consult any of these documents (see point XI.(d) above).

The board is not convinced by these arguments because the only information needed by the person skilled in the art is that information about an upcoming end time of non-preferred programming can be obtained from metadata within that non-preferred programming. Based on the disclosure of document D4 or D7 that metadata indicating end times of commercial breaks is indeed available, the implementation of an advance warning becomes trivial because it simply entails obtaining and evaluating this metadata. For this step, documents D4 or D7 do not have to use the metadata for exactly the same purpose.

2.12 In view of the above, the person skilled in the art would have arrived at all the distinguishing features in a straightforward manner.

2.13 Hence, the board finds that the subject-matter of claim 1 does not involve an inventive step within the meaning of Article 56 EPC.

3. First auxiliary request - inventive step
(Article 56 EPC)

3.1 The subject-matter of claim 1 of the first auxiliary request differs from claim 1 of the main request in that the former further specifies:

"wherein identifying the user-interest in the particular broadcast programming (508) includes detecting output of the particular broadcast

programming to the display device (114a, 114b, 114c) for a predetermined and configurable time period;"

3.2 This is a further distinguishing feature (see point 2.3 above for the other distinguishing features) over the disclosure of document D5 in which a displayed programme is set as a preferred programme if it matches preferred programme information, e.g. if it is included in a stored list of preferred programmes (see D5, paragraph [0042]).

3.3 The technical effect of this further distinguishing feature is an alternative way of identifying that a programme is preferred by a user.

The objective technical problem can therefore be seen in finding an alternative way of identifying that a programme is preferred by a user.

3.4 This objective technical problem and the problem formulated under point 2.9 above are partial problems. This is because the features related to:

(a) identifying that a programme is preferred by a user

(b) implementing an advance warning of the end of non-preferred programming so that a viewer has enough time to switch back to the preferred programming and does not miss any of it once the non-preferred programming has ended

are not functionally interdependent, i.e. do not mutually influence each other to achieve a technical success over and above the sum of their respective individual effects. Hence, what has to be established is whether each set of features is separately obvious

in light of the prior art (see Case Law of the Boards of Appeal, 10th edition 2022, I.D.9.3.2.).

- 3.5 The appellant submitted that the problem of identifying that a programme was preferred by a user was not a partial problem. The appellant argued that the corresponding expressions "programme is preferred" and "preferred programming" appeared in both problems. The navigation back to the preferred programming mentioned under point 3.4 b) would only be made possible by its identification under point 3.4 a) (see point XI.(e) above).

The board is not convinced by these arguments for the following reasons. Point 3.4 a) is about identifying that a programme is preferred by a user, i.e. how to find out which programme a user prefers. This programme is then the programming to switch back to in point 3.4 b). For point 3.4 b), the choice of a programme as preferred is irrelevant. It is just the programme to return to once a non-preferred programme on the same channel is about to end. Hence, there is no synergistic effect or technical success over and above the sum of the respective individual effects.

- 3.6 The person skilled in the art faced with the partial objective technical problem set out under point 3.3 above would have considered document D6. This is because document D6 describes the same situation in which a user commences viewing a programme on a base channel, then temporarily changes channel after a commercial break started on the base channel and is presented with a graphical user interface indicating the option to resume watching the programme on the base channel once the commercial break is over (see column 2, line 65 to column 3, line 3 and Figure 4).

Document D6 discloses as one alternative for identifying user interest in a piece of particular broadcast programming that the television "receiver can detect the base channel to monitor by ... a viewer remaining on a channel for a specific amount of time, e.g., five minutes on a single channel" (see column 3, lines 29 to 32).

- 3.7 The person skilled in the art would have incorporated these features of document D6 into a television apparatus according to document D5, thus arriving at the distinguishing feature quoted under point 3.1 above.
- 3.8 Furthermore, the person skilled in the art would have arrived at the other distinguishing features in a straightforward manner for the reasons provided in section 2. above.
- 3.9 In view of point 3.4 above, the board thus finds that the subject-matter of claim 1 does not involve an inventive step within the meaning of Article 56 EPC.
4. Second auxiliary request - admittance (Article 13(2) RPBA 2020)
- 4.1 The second auxiliary request was filed after the notification of the summons to oral proceedings. The second auxiliary request is therefore an amendment within the meaning of Article 13(2) RPBA 2020.
- 4.2 In the communication under Article 15(1) RPBA 2020, the board introduced documents D5 to D7 *ex officio* into the appeal proceedings and raised an objection of lack of inventive step starting from document D5 for the first

time. In response to this communication, the appellant filed the second auxiliary request with the aim of overcoming this new objection. This represents an exceptional circumstance within the meaning of Article 13(2) RPBA 2020. Exercising its discretion under this provision, the board thus decided to admit the second auxiliary request into the appeal proceedings.

5. Second auxiliary request - inventive step
(Article 56 EPC)

5.1 The subject-matter of claim 1 of the second auxiliary request differs from claim 1 of the first auxiliary request in that the former further specifies:

"wherein the channel change event includes: counting the number of detected channel changes within a predetermined period of time, comparing the number of detected channel changes to a predetermined non-zero threshold, and determining that the user has entered into a surf mode when the number of detected channel changes is greater than the non-zero predetermined threshold;

in response to determining that the user has entered into surf mode,"

This amendment has to be understood together with the preceding feature of claim 1 reading *"detecting, by the television receiver (110, 112a, 112b) during a commercial break, a channel change event from a channel associated with the particular broadcast programming to a different channel"* and the subsequent feature of claim 1 reading *"monitoring, by the television receiver*

(110, 112a, 112b), status of the commercial break (506)".

Together, these features mean that if a first channel change event during a commercial break is detected followed by further channel changes, it is the status of the commercial break on the channel associated with the particular programming, i.e. the initial channel, which is to be monitored.

- 5.2 Document D5 discloses that television content conveyed by a first programming stream on a first channel is displayed, where this first programming stream includes a preferred television programme (see paragraph [0045]). A television programme may be identified as preferred because it is included in a list of preferred programmes (see paragraph [0042]). If the first programming stream is interrupted by a commercial (see paragraph [0046]) and a user switches to a second channel (see paragraph [0047]), the first channel is monitored (see paragraph [0048]).

However, it is not clear from document D5 what happens if the second channel conveys a second programming stream which is also in the list of preferred television programmes and on that second channel another commercial is shown and the user switches to a third channel.

When implementing a system according to document D5, the person skilled in the art would thus have had to make a decision on which channel(s) to monitor, namely the first channel, the second channel or both.

At least one obvious choice for the person skilled in the art, in view of potentially limited monitoring

resources including tuners, would have been to monitor only the first channel.

This means that the first channel is monitored in response to a first channel change if that first channel change is followed by a second channel change, i.e. if the number of detected channel changes within a predetermined period of time is greater than a non-zero predetermined threshold.

Hence, this obvious choice for the person skilled in the art would have led to the further features of claim 1 quoted under point 5.1 above.

5.3 The appellant argued that deriving a problem and an obvious solution from the disclosure of document D5 was done only in hindsight of the current invention. Screening channels between the preferred channel serving as the start and end point was nowhere disclosed in the prior art (see point XI.(f) above).

The board is not convinced by these arguments for the following reasons.

Firstly, the board takes the view that to observe what should happen if the scheme set out in document D5 is applied in a nested manner is not hindsight but an inevitable finding of the person skilled in the art when attempting to implement the system of document D5. This issue was observed by the appellant itself (see letter dated 6 January 2023, page 2, third paragraph from the bottom).

Secondly, document D6 discloses a similar situation in which every time a user switches channels, the previous channel may be monitored. However, according to

document D6, restrictions on the use of monitoring resources may be placed in that a user must remain on a channel for a predetermined amount of time for that channel to be monitored, and if a user is channel surfing, intermediate channel changes are ignored (see column 7, lines 15 to 26). Hence, document D6 also discloses that if channel surfing follows a channel change from a first channel which had been displayed for a predetermined time period, it is the first channel which is monitored.

- 5.4 The appellant argued that the cited passage of document D6 neither mentioned counting nor a threshold (see point XI.(f) above).

The board is not convinced by this argument because claim 1 only requires determining whether the counted number of channel changes is greater than a non-zero predetermined threshold. This threshold could thus be one. The cited passage of document D6 distinguishes between a change from a first channel on which a user remained for a specific amount of time and further intermediate channel changes. It is thus implicit in document D6 that at least a counting from one (first channel change) to two (the first of the intermediate channel changes) takes place, and the first channel change is distinguished from the intermediate channel changes using the number one as a threshold.

- 5.5 The appellant further argued that claim 1 provided two checks on whether to monitor an initial channel which made the choice of the channel to monitor more reliable. This was not disclosed in the prior art.

The board is not convinced by this argument because document D6 also discloses two conditions for

monitoring a channel by stating in column 7, lines 24 to 26 *"if a user is channel surfing, or does not remain on a channel for a specific amount of time, the system can ignore intermediate channel changes"*.

- 5.6 The board is not convinced that it combined the disclosures of documents D5, D4 and D6 in a non-justifiable manner (see point XI.(g) above). Document D6 discloses that a server analyses a stream to identify the start and end times of commercial breaks and transmits this information to a receiver (see D6, column 4, lines 47 to 53: *"By monitoring the video and audio stream 304 with ad detection portion 304, the system detects changes in the audio levels of the stream 304 to determine the start and end times of commercials. These start and end times are then transmitted along with the audio/video stream via satellite, or can also be sent via a secondary transmission link such as the internet, to IRD 112"*). Hence, similarly to document D4, document D6 discloses using metadata to identify the beginning and end of a commercial break. As both documents have a similar pertinent disclosure, the board finds it justified to combine the disclosures of document D5 with those of D4 and D6. For continuity reasons and comprehensibility of the decision, the board retained the reference to document D4.

- 5.7 Therefore, the board finds that the subject-matter of claim 1 of the second auxiliary request lacks inventive step (Article 56 EPC) over the disclosures of documents D5, D4 and D6 combined with common general knowledge.

6. Conclusion

The main request and the first and second auxiliary requests are not allowable because the subject-matter of claim 1 of each of these requests does not involve an inventive step within the meaning of Article 56 EPC. 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 Chair:



K. Boelicke

B. Willems

Decision electronically authenticated