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**Datasheet for the decision
of 18 October 2018**

Case Number: T 1120/13 - 3.5.04

Application Number: 09786430.0

Publication Number: 2324627

IPC: H04N5/91, H04N7/58

Language of the proceedings: EN

Title of invention:

RECEIVING DEVICE

Applicant:

NDS Limited

Headword:

Relevant legal provisions:

EPC Art. 84, 123(2)

RPBA Art. 13(1)

Keyword:

Claims - clarity - main and auxiliary requests (no)
Amendments - sixth auxiliary request - added subject-matter
(yes)

Decisions cited:

Catchword:



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Case Number: T 1120/13 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 18 October 2018

Appellant: NDS Limited
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on
25 February 2013 refusing European patent
application No. 09786430.0 pursuant to
Article 97(2) EPC**

Composition of the Board:

Chairman C. Kunzelmann
Members: B. Willems
T. Karamanli

Summary of Facts and Submissions

- I. The appeal is against the decision of the examining division dated 25 February 2013 refusing European patent application No. 09 786 430.0, which was published as WO 2010/020890 A1.
- II. The following document was cited in the decision under appeal:

D1: US 2008/187291 A1.
- III. The application was refused on the grounds that claims 1 and 7 of the main request and first and second auxiliary requests and claims 1 and 6 of the third auxiliary request lacked clarity (Article 84 EPC), that the subject-matter of claims 1 and 6 of the third auxiliary request lacked inventive step over the disclosure of document D1 (Article 56 EPC), and that the fourth auxiliary request was not admitted into the proceedings under Rule 137(3) EPC.
- IV. The applicant filed notice of appeal, requesting that the examining division's decision be set aside. With its statement of grounds of appeal, the appellant submitted claims according to a main request and first to fourth auxiliary requests and requested 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 alternatively on the basis of the claims according to one of the first to fourth auxiliary requests filed with that statement. It provided arguments as to why the claims of all requests met the requirements of Articles 54, 56 and 84 EPC.

V. The board issued a summons to oral proceedings. In a communication under Article 15(1) RPBA (Rules of Procedure of the Boards of Appeal, OJ 2007, 536), annexed to the summons, the board gave its provisional opinion that none of the requests on file met the requirements of Articles 84 and 123(2) EPC. The board further indicated that should the appellant succeed in convincing it that the claims of one of the requests on file met the requirements of Articles 84 and 123(2) EPC, it would be minded to remit the case to the department of first instance for further prosecution (Article 111(1) EPC).

VI. With the reply dated 18 September 2018, the appellant filed amended claims according to a fifth auxiliary request. It submitted arguments as to why the claims of all requests met the requirements of Articles 54, 56, 84 and 123(2) EPC.

VII. The board held oral proceedings on 18 October 2018.

The appellant was represented.

During the oral proceedings, the appellant reordered the requests such that the previous fifth, third and fourth auxiliary requests became the third, fourth and fifth auxiliary requests, respectively. In addition, it submitted claims according to a sixth 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 or of one of the first or second auxiliary requests filed with the statement of grounds of appeal, or the third auxiliary request filed as fifth auxiliary

request by letter dated 18 September 2018, the fourth or fifth auxiliary requests filed as third and fourth auxiliary requests with the statement of grounds of appeal or the sixth auxiliary request filed at the oral proceedings on 18 October 2018.

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

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

"A method of operating a receiving device for receiving video broadcasting data to schedule a recording of a television program, said method comprising:

receiving television channel group data defining a television channel group, said television channel group comprising a plurality of television channels transmitting the same content at the same time with a different video quality;

receiving television program data defining a television program to be recorded, said television program data specifying a television channel transmitting said television program; and

if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting a television channel to record the television program at a highest available video quality; and

scheduling a recording of said television program to be recorded using the selected television channel;

characterised in that:

said television channel group data is received in a configuration file comprising: said television channel group data and access rights data defining access rights required by said receiving device to access each television channel in said plurality of television channels; and

the step of selecting the television channel to record the television program comprises determining which of the plurality of television channels in said television channel group that said receiving device has rights to access has the highest video quality."

IX. Claim 1 of the first auxiliary request reads as follows:

"A method of operating a receiving device for receiving video broadcasting data to schedule a recording of a television program, said method comprising:

receiving television channel group data defining a television channel group, said television channel group comprising a plurality of television channels transmitting the same content at the same time with a different video format;

receiving television program data defining a television program to be recorded, said television program data specifying a television channel transmitting said television program; and

if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting a television channel to record

the television program in a video format having a highest available video quality; and

scheduling a recording of said television program to be recorded using the selected television channel;

characterised in that:

said television channel group data is received in a configuration file comprising: said television channel group data and access rights data defining access rights required by said receiving device to access each television channel in said plurality of television channels; and

the step of selecting the television channel to record the television program comprises determining which of the plurality of television channels in said television channel group that said receiving device has rights to access is in a video format having the highest video quality."

- X. Claim 1 of the second auxiliary request differs from claim 1 of the first auxiliary request in the following wording preceding the phrase "characterised in that":

"if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting a television channel to record the television program in a video format having a highest available video quality based on a list of said television channels in said television channel group sorted from highest video quality to lowest video quality; and

scheduling a recording of said television program to be recorded using the selected television channel".

XI. Claim 1 of the third auxiliary request reads:

"A method of operating a receiving device for receiving video broadcasting data to schedule a recording of a television program, said method comprising:

receiving television channel group data defining a television channel group, said television channel group comprising a high definition television channel transmitting content at a first broadcast video quality and a standard definition television channel transmitting the content at a second broadcast video quality lower than the first broadcast video quality, the channels transmitting the same content at the same time;

receiving television program data defining a television program to be recorded, said television program data specifying a television channel transmitting said television program; and

if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting, between the high definition television channel and the standard definition television channel, a television channel to record the television program at a highest available broadcast video quality; and

scheduling a recording of said television program to be recorded using the selected television channel;

characterised in that;

said television channel group data is received in a configuration file comprising: said television channel group data and access rights data defining access rights required by said receiving device to access each television channel in said plurality of television channels; and

the step of selecting the television channel to record the television program comprises determining which of the plurality of television channels in said television channel group that said receiving device has rights to access has the highest broadcast video quality."

XII. Claim 1 of the fourth auxiliary request reads:

"A method of operating a receiving device for receiving video broadcasting data to schedule a recording of a television program, said method comprising:

receiving television channel group data defining a television channel group, said television channel group comprising a high definition television channel and a standard definition television channel transmitting the same content at the same time;

receiving television program data defining a television program to be recorded, said television program data specifying a television channel transmitting said television program; and

if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting, between the high definition television channel and the standard definition

television channel, a television channel to record the television program at a highest available video quality; and

scheduling a recording of said television program to be recorded using the selected television channel;

characterised in that:

said television channel group data is received in a configuration file comprising: said television channel group data and access rights data defining access rights required by said receiving device to access each television channel in said plurality of television channels; and

the step of selecting the television channel to record the television program comprises determining which of the plurality of television channels in said television channel group that said receiving device has rights to access has the highest video quality."

XIII. Claim 1 of the fifth auxiliary request reads:

"A method of operating a receiving device for receiving video broadcasting data to schedule a push video on demand recording of a television program, said method comprising:

receiving television channel group data defining a television channel group, said television channel group comprising a plurality of television channels transmitting the same content at the same time with a different video quality;

receiving television program data from a headend, said television program data defining a television program to be recorded and specifying a television channel transmitting said television program; and

if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting a television channel to record the television program at a highest available video quality; and

scheduling a recording of said television program to be recorded using the selected television channel;

wherein:

said television channel group data is received in a configuration file comprising: said television channel group data and access rights data defining access rights required by said receiving device to access each television channel in said plurality of television channels; and

the step of selecting the television channel to record the television program comprises determining which of the plurality of television channels in said television channel group that said receiving device has rights to access has the highest video quality."

XIV. Claim 1 of the sixth auxiliary request reads:

"A method of operating a receiving device for receiving video broadcasting data to schedule a recording of a television program, said method comprising:

receiving television channel group data defining a television channel group, said television channel group comprising a plurality of television channels consisting of a standard definition channel having an aspect ratio 16:9, a standard definition channel having an aspect ratio 4:3; and a high definition channel; each of the plurality of television channels transmitting the same content at the same time with a different video quality;

receiving television program data defining a television program to be recorded, said television program data specifying a television channel transmitting said television program;

sorting the plurality of television channels from the highest video quality to the lowest video quality, resulting in a sorted list consisting of: the high definition channel, the standard definition channel having an aspect ratio 16:9 and the standard definition channel having an aspect ratio 4:3; and

if said television channel transmitting said television program to be recorded is a member of said television channel group, selecting a television channel to record the television program; and

scheduling a recording of said television program to be recorded using the selected television channel;

wherein:

said television channel group data is received in a configuration file comprising: said television channel group data and access rights data defining access rights required by said receiving device to access each television channel in said plurality of television channels; and

the step of selecting the television channel to record the television program comprises selecting, based on the sorted list, the television channel in the plurality of television channels in said television channel group that has the highest video quality which said receiving device has rights to access."

XV. The examining division's objections, where relevant to the present decision, may be summarised as follows:

The video quality not only depended on the standard-definition (SD) or high-definition (HD) resolution of the video but also on the number and nature of artefacts introduced when compressing and transmitting the video. Therefore, it was not clear on the basis of which criteria a program with the highest available video quality was selected (see decision, point 2.1).

XVI. The appellant's arguments, where relevant to the present decision, may be summarised as follows:

(a) The standards defined a limited number of video qualities (SD and HD) and a limited number of relevant video formats. Selecting the video format took precedence over selecting the quality. This was consistent with pages 2 and 11 of the

description (see letter dated 18 September 2018, page 2, first and second full paragraphs). A stream generated in HD at the headend would always be of higher quality than a stream generated in SD.

- (b) The phrase "*highest available video quality*" was clear in the context of the claims (see statement of grounds of appeal, page 2, section "Art. 84 EPC"), as it made it clear that the quality available from the headend, not the received quality, was meant.
- (c) The selection of the video quality was based on information in the channel group data received from the headend and did not rely on a subjective assessment of the quality of the delivered stream. The user selected a channel provided from the headend prior to receiving the channel. Hence, the selection could not be based on the quality of the received channel.
- (d) Although the term "video quality" was broad, the person skilled in the art could easily determine and rank the video quality based on the multitude of factors which influenced it.
- (e) Claim 1 of the second auxiliary request clarified that the selection was based on a list of television channels sorted from highest video quality to lowest video quality.
- (f) Claim 1 of the third auxiliary request clarified that an SD channel transmitted content at a video quality inferior to an HD channel. This was supported by the description, page 2, lines 10 to 12.

(g) The method set out in claim 1 of the sixth auxiliary request was based on the description of figures 3 and 4. In particular, the claimed list was disclosed on page 14, lines 9 to 13.

(h) Claim 1 of the sixth auxiliary request specified sorting the television channels from highest video quality to lowest video quality, wherein the HD channel had the highest video quality and the SD 4:3 channel had the lowest video quality.

Reasons for the Decision

1. The appeal is admissible.
2. *Clarity - main request and first, second, fourth and fifth auxiliary requests (Article 84 EPC)*
 - 2.1 According to Article 84 EPC, the claims "shall be clear" and supported by the description.
 - 2.2 The clarity of a claim is not diminished by the mere breadth of a term contained in it, if the meaning of that term - either per se or in the light of the description - is unambiguous for a person skilled in the art (see also Case Law of the Boards of Appeal of the European Patent Office, 8th edition 2016, II.A.3.3).
 - 2.3 Claim 1 of each of the main request and first, second, fourth and fifth auxiliary requests specifies selecting a television channel to record the television program at (or in a video format having) *"a highest available video quality"*.

- 2.4 The board has not been convinced that the phrase "*highest available video quality*" is clear because the person skilled in the art could easily determine, on the basis of known influencing factors, which television channel provided the highest video quality at the headend.
- 2.4.1 Claim 1 of all requests specifies a method of operating a receiving device. To select the television channel transmitting the "*highest available video quality*", the receiving device must be able to determine which television channel provides the "*highest available video quality*". However, the method does not comprise a step enabling the receiving device to determine the video quality based on varying influencing factors. The claim does not reflect how the receiving device uses the alleged knowledge of the person skilled in the art to determine the video quality (see point XVI(d) above).
- 2.4.2 In video coding, the term "video quality" is used to denote the (lack of) distortion and artefacts introduced by compressing the video (see also section XV above). In the context of television broadcasting, the video is typically compressed at the headend. Hence, not only the quality received at the device, but also the quality provided by the headend is influenced by the compression algorithm used (see point XVI(b) above). In general, the video quality at the headend is influenced by numerous factors, including resolution, compression artefacts, frame rate, etc. Depending on what is perceived to be "video quality", different factors would be assigned different weightings in determining the quality. This influence of numerous factors on "video quality" is also present if there is a limited number of relevant video formats

(see claim 1 of the first and second auxiliary requests). Moreover, the board is not convinced that high-definition (HD) images necessarily result in a channel of highest available video quality (see point XVI(a) above). Even if there is a high-definition (HD) television channel and a standard-definition (SD) television channel (see claim 1 of the fourth auxiliary request), the images of highest available video quality are not necessarily broadcast on the high-definition television channel. Summarising, the concept of "*highest available video quality*" is not clearly defined, because it is influenced by a multitude of varying factors.

- 2.4.3 The claims do not specify receiving these factors for each of the channels (e.g. resolution, frame rate, compression algorithm, etc.) in the channel group data (see point XVI(c) above). Even if these factors were received in the channel group data, the "*highest available video quality*" could not be unambiguously determined because of their varying, not clearly defined influence on the perceived "video quality".
- 2.4.4 Claim 1 of the second auxiliary request specifies that the selection of the television channel having the "*highest available video quality*" is based on a sorted list, but it does not specify that the device receives the sorted list. Hence, the claim encompasses the possibility that the device itself sorts the television channels, possibly on the basis of some end-user input. However, a list sorting the television channels from highest video quality to lowest video quality can only be drawn up after establishing which television channel would take the first position in the list, i.e. which television channel has the highest video quality. Therefore, contrary to the appellant (see point XVI(e))

above), the board is of the opinion that claim 1 of the second auxiliary request does not clarify how the receiver selects the television channel with the highest available video quality.

2.5 In view of the above, the board finds that claim 1 of the main and first, second, fourth and fifth auxiliary requests does not meet the requirements of Article 84 EPC, because it is not clear how the receiving device determines which channel provides the *"highest available video quality"*.

3. *Clarity - third auxiliary request (Article 84 EPC)*

3.1 Claim 1 of the third auxiliary request specifies *"a high definition television channel transmitting content at a first broadcast video quality and a standard definition television channel transmitting the content at a second broadcast video quality lower than the first broadcast video quality [...] selecting, between the high definition television channel and the standard definition television channel, a television channel to record the television program at a highest available broadcast video quality [...] the step of selecting the television channel to record the television program comprises determining which of the plurality of television channels in said television channel group that said receiving device has rights to access has the highest video quality"*.

3.2 The quoted wording refers to *"a standard definition television channel"* and *"a high definition television channel"* (emphasis added). It is apparent from the sole embodiment described on pages 9 to 14 of the application (one SD 4:3 channel, one SD 16:9 channel and one HD channel) that the claim is not limited to

one HD channel and one SD channel. As submitted by the appellant, the claim relates to a specific broadcast context in which **an** SD channel transmits content at a lower video quality than **an** HD channel (see also point XVI(f) above). If only one SD and one HD channel are available, the receiver would select the HD channel. However, for all other constellations it is not clear how the receiving device determines which channel provides the "*highest available video quality*" (see also section 2 above).

3.3 In view of the above, the board finds that claim 1 of the third auxiliary request does not meet the requirements of Article 84 EPC.

4. *Sixth auxiliary request - admission into the proceedings (Article 13(1) RPBA)*

The board finds that the sixth auxiliary request was filed in reaction to the discussion of the objections set out in sections 2 and 3 above during the oral proceedings. Therefore, the board exercised its discretion referred to in Article 13(1) RPBA and decided to admit the sixth auxiliary request into the proceedings.

5. *Sixth auxiliary request - added subject-matter (Article 123(2) EPC)*

5.1 It is established case law that, for an amendment to a claim of a European patent application to be allowable under Article 123(2) EPC, the amendment can only be made within the limits of what a person skilled in the art would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of the

description, claims and drawings of the application as filed (see Case Law of the Boards of Appeal of the European Patent Office, 8th edition 2016, II.E.1).

- 5.2 Claim 1 of the sixth auxiliary request no longer refers to the "*highest available video quality*" (emphasis added) but specifies "*sorting the plurality of television channels from the highest video quality to the lowest video quality*". Hence, according to claim 1 of the sixth auxiliary request "availability" is not necessarily taken into account when drawing up the sorted list.
- 5.3 The board is not convinced that the parts of the application indicated by the appellant (see point XVI(g) above) disclose the feature quoted in point 5.2 above. According to page 14, lines 3 to 5, step 305 shown in figure 3 sorts the list of "*services in each retrieved service group from the highest video quality to the lowest video quality available to the user*" (emphasis added), with the availability typically being dependent on the types of connection used to connect the receiving device with a display device (see lines 5 to 8). Thus, from the passage indicated by the appellant, when read in context, a person skilled in the art would not directly and unambiguously derive that sorting the list did not need to take "availability" into account.
- 5.4 In view of the above, the board finds that claim 1 of the sixth auxiliary request does not meet the requirements of Article 123(2) EPC.

6. *Sixth auxiliary request - clarity (Article 84 EPC)*
- 6.1 Claim 1 of the sixth auxiliary request specifies *"sorting the plurality of television channels from the highest video quality to the lowest video quality, resulting in a sorted list consisting of: the high definition channel, the standard definition channel having an aspect ratio 16:9 and the standard definition channel having an aspect ratio 4:3"*.
- 6.2 Unlike the appellant (see point XVI(h) above), the board is of the opinion that the wording quoted in point 6.1 above does not define the order of the channels in the list, but merely states that the list consists of three mentioned channels. Therefore, it is not clear how the receiving device determines which channel provides the *"highest video quality which said receiving device has rights to access"* (see also section 2 above).
- 6.3 In view of the above, the board concludes that claim 1 of the sixth auxiliary request does not meet the requirements of Article 84 EPC.
7. Since none of the appellant's requests is allowable, the appeal is to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



K. Boelicke

C. Kunzelmann

Decision electronically authenticated