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**Datasheet for the decision
of 15 July 2020**

Case Number: T 1888/14 - 3.5.04

Application Number: 09729744.4

Publication Number: 2281394

IPC: H04N7/24

Language of the proceedings: EN

Title of invention:

METHOD AND APPARATUS FOR CONTENT REPLACEMENT IN LIVE
PRODUCTION

Applicant:

GVBB Holdings S.A.R.L

Headword:

Relevant legal provisions:

EPC Art. 84, 123(2)

Keyword:

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

Decisions cited:

Catchword:



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Case Number: T 1888/14 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 15 July 2020

Appellant: GVBB Holdings S.A.R.L.
(Applicant) 412F, route d'Esch
2086 Luxembourg (LU)

Representative: Hill, Justin John
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 28 April 2014
refusing European patent application
No. 09729744.4 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 28 April 2014 refusing European patent application No. 09 729 744.4, which was published as international application WO 2009/126275 A1.
- II. The documents cited in the decision under appeal included the following:
- D1: US 2004/0189873 A1.
- III. The decision under appeal was based on the following grounds.
- The subject-matter of claim 1 of all requests then on file extended beyond the disclosure of the application as filed (Article 123(2) EPC).
 - The subject-matter of claim 1 of all requests then on file lacked inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art (Article 56 EPC).
- IV. The applicant (hereinafter: appellant) filed notice of appeal. With the statement of grounds of appeal, the appellant submitted claims according to first, second and third 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 filed by letter dated 3 March 2014 or on the basis of the claims of one of the auxiliary requests filed with the statement of grounds of appeal. It submitted reasons as to why the claims of all the

requests met the requirements of Articles 54, 56 and 123(2) EPC.

- V. The board issued a summons to oral proceedings dated 7 October 2019. 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 introduced the following document into the appeal proceedings:

D6: US 2003/0070167 A1.

The board gave the following provisional opinion.

- Claim 1 of each of the requests did not meet the requirements of Article 84 EPC.
- Claim 1 of the main request did not meet the requirements of Article 123(2) EPC.
- The subject-matter of claim 1 of each of the requests did not meet the requirements of Article 56 EPC because it lacked inventive step over the combined disclosures of documents D6 and D1 and the common general knowledge of a person skilled in the art.

- VI. With its reply dated 26 February 2020, the appellant filed amended claims according to a "*New Auxiliary Request*" and a "*New Auxiliary Request A*". It indicated a basis for the amendments in the application as filed and submitted arguments as to why the amended claims met the requirements of Articles 56 and 84 EPC.

- VII. In a communication dated 6 March 2020, the board stated that it appeared from the letter dated 26 February 2020

that the appellant was requesting that the decision under appeal be set aside and that the case be remitted to the department of first instance for examination of inventive step (Article 56 EPC) on the basis of the claims of the main request filed by letter dated 3 March 2014 (main request), or in the alternative, that a patent be granted on the basis of the claims of one of the first, second or third auxiliary requests filed with the statement of grounds of appeal, the fourth auxiliary request filed by letter dated 26 February 2020 as "*New Auxiliary request*", or the fifth auxiliary request filed by letter dated 26 February 2020 as "*New Auxiliary request A*".

The appellant was asked to inform the board if the requests set out above did not properly reflect the intended requests.

- VIII. By communication of the Registry dated 8 May 2020, the appellant was asked whether, considering the current precautionary measures against the spread of the coronavirus (COVID-19), in particular existing travel restrictions in Europe, it expected not to be affected by these travel restrictions and would be able to come to the premises of the Boards of Appeal to participate in the oral proceedings scheduled for 10 June 2020.
- IX. By letter dated 26 May 2020, the appellant withdrew its request for oral proceedings and requested a "*decision on the state of the file*".
- X. By communication dated 2 June 2020, the registrar of the board informed the appellant that the oral proceedings scheduled for 10 June 2020 had been cancelled.

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

"A method for inserting a new advertisement segment into a time slot between successive content segments of a live television program played out during live production comprising the steps of:

selecting a new advertisement segment for insertion into the time slot;

copying the new advertisement segment to an encoder;

encoding the successive content segments of the live television program;

playing out a successive content segment of the live television program for distribution over a first set of channels for over-the-air distribution and a second channel for over-the-internet distribution until the occurrence of the time slot whereupon the encoder switches from delivering the successive content segments of the live television program to the new advertisement segment that was previously copied to the encoder, which undergoes play out for distribution over the second channel; and

if the new content segment has a duration longer than the time slot allotted for inserting the new content segment, manipulating the successive content segments of the live television program to reduce the length of at least one successive content segment at the encoder to provide a substantially uninterrupted content stream."

XII. Claim 1 of the first auxiliary request and claim 1 of the second auxiliary request read as follows (the

additional wording of claim 1 of the second auxiliary request is in *italics*):

"A method for inserting a new advertisement segment into a time slot between successive content segments of a live television program played out during live production comprising the steps of:

selecting a new advertisement segment for insertion into the time slot;

copying the new advertisement segment to an encoder *to appear at a predefined advertising publishing point, the new segment bearing a sequential identifier to enable an encoder (24) to access advertisement segments in order;*

encoding by an(d) encoder (24) the successive content segments of the live television program;

playing out a successive content segment of the live television program for distribution over a first set of channels for distribution over one or more satellite or cable systems and a second channel for over-the-internet distribution until the occurrence of the time slot whereupon the encoder (24) switches from delivering the successive content segments of the live television program to the new advertisement segment that was previously copied to the encoder, which undergoes play out for distribution over the second channel; and

if the new content segment has a duration longer than the time slot allotted for inserting the new content segment, manipulating the successive content segments of the live television program to reduce the length of

at least one successive content segment at the encoder to provide a substantially uninterrupted content stream."

- XIII. Claim 1 of the third auxiliary request differs from claim 1 of the first auxiliary request on account of the following definition of the last feature:

"if the new content segment has a duration longer than the time slot allotted for inserting the new content segment, manipulating the successive content segments of the live television program in post-production prior to publication to reduce the length of at least one successive content segment at the encoder to provide a substantially uninterrupted content stream".

- XIV. Claim 1 of the fourth auxiliary request and claim 1 of the fifth auxiliary request read as follows (with the additional wording of claim 1 of the fourth auxiliary request in *italics*):

"A method for inserting a new advertisement segment into a time slot between successive content segments of *a live television program* played out during live production comprising the steps of:

selecting a new advertisement segment for insertion into the time slot;

encoding by a first encoder (24) the successive content segments of the live television program into a first coding format for distribution over a first set of channels for distribution via terrestrial over-the-air broadcast and/or over satellite or cable television and a second coding format for over-the-internet distribution;

encoding, by a second encoder (30), the new advertisement segment to the second coding format for over-the-internet distribution, with the new advertisement segment bearing a sequential identifier to enable the encoder (24) to access the advertisement segment to appear at a predefined advertising publishing point;

playing out the successive content segments of the live television program for distribution over a first set of channels for distribution over terrestrial over-the-air broadcast and/or over one or more satellite or cable systems and a second channel for over-the-internet distribution;

identifying an occurrence of the time slot in the successive content segments during the over-the-internet distribution, and switching, by the first encoder (24), from delivering the successive content segments of the live television program to the new advertisement segment that was previously encoded in the second coding format for play out for distribution over the second channel, whereupon the new advertisement segment is stitched into an output file of the successive content segments; and

if the new advertisement segment has a duration longer than the time slot allotted for inserting the new advertisement segment, the first encoder (24) reducing the length of the at least one successive content segment to provide a substantially uninterrupted content stream that is seamlessly distributed over the second channel."

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

- (a) The amendments made to claim 1 of the fourth and fifth auxiliary requests were based on *inter alia* page 6, lines 18 to 21, of the description as filed (see letter dated 26 February 2020, point 2.2).

- (b) The board introduced document D6 into the proceedings and used D6 as a new starting point for its assessment of inventive step. Therefore, the appellant stated that the case should be remitted to the department of first instance for examination of inventive step on the basis of the claims of the main request filed by letter dated 3 March 2014 to provide it with a fair opportunity to consider and respond to the new objections. Failure to do so would amount to a violation of its right to be heard (see letter dated 26 February 2020, point 1.2).

Reasons for the Decision

1. *Appellant's requests*

In the communication dated 6 March 2020 the board listed the appellant's requests as they appeared from the file. The appellant was asked to inform the board if these requests did not properly reflect the intended requests (see section VII above). The appellant did not reply to the board's communication. Therefore, the board's decision is based on the requests as set out in the communication dated 6 March 2020.

2. *Main request - remittal*

- 2.1 The appellant requested that the case be remitted to the department of first instance for examination of

inventive step (Article 56 EPC) on the basis of the claims of the main request filed by letter dated 3 March 2014 ("*claims of the main request*") to provide it with a fair opportunity to consider and respond to the objection of lack of inventive step over document D6.

In the board's view, this request for remittal can only be granted if the specific question of inventive step over document D6 is the only one preventing it from setting aside the decision under appeal and granting a patent on the basis of the claims of the main request. Therefore, it must first be established whether the claims of the main request satisfy the requirements of other relevant provisions of the EPC, e.g. Article 84 EPC.

2.2 According to Article 84 EPC, the claims "*shall be clear*" and supported by the description.

The clarity of a claim is not diminished by the mere breadth of a term contained in it, if the meaning of such term - either per se or in the light of the description - is unambiguous for a person skilled in the art (see Case Law of the Boards of Appeal of the European Patent Office, 9th edition 2019 ("*Case Law*"), II.A.3.3).

2.3 Claim 1 of the main request specifies

"copying the new advertisement segment to an encoder [...]

playing out a successive content segment [...] until [...] the encoder switches from delivering the successive content segments [...] to the new

advertisement segment that was previously copied to the encoder, which undergoes play out for distribution over the second channel [... and]

if the new content segment has a duration longer than the time slot allotted for inserting the new content segment, manipulating the successive content segments [...] to reduce the length of at least one successive content segment at the encoder".

- 2.4 In the context of the application in this case, the terms "copying" and "switching" are ambiguous. Copying data normally entails reading data from a first memory and writing the same data into a second memory. It is not clear from claim 1 of the main request from which memory the advertisement segment is read and into which memory it is written.

According to the description, page 7, line 16, and page 9, lines 1 and 2, the work flow manager stores advertisements which "*get copied from the work flow manager 34 to the encoder 24*". According to page 9, lines 12 to 14, the "*encoder 24 of FIG. 1 switches switch from delivering the Over-the-Air Content to the 'Over-the Internet' advertisements, that is the advertisements copied during step 210 of FIG. 2*".

The passage on page 9, lines 1 to 3, discloses that the "*advertisement files get copied from the work flow manager 34 to the encoder 24*". This passage does not disclose whether the advertisements are copied to a memory at the input or the output of the encoder.

Figure 1 does not show the switch or the memory for storing the copied data. Therefore, it is not clear

whether the switch and the memory are at the input or the output of the encoder.

According to the description, pages 6 and 7, both the encoder and the work flow manager output data in the Windows® Media Video format. This suggests that the data is switched at the output of encoder 24. According to the description, page 9, lines 3 and 4, the *"advertising files bear sequential identifiers to enable encoder 24 to access the advertisements in order"*. The encoder accessing the data suggests that the switch is at the input to the encoder. Moreover, the data stored in the files has to be streamed before distribution. Reading the data stored in the files, streaming the content and inserting the content into a second stream goes beyond what is normally understood by *"switching"*. Therefore, it is ambiguous in which format the copied data is stored.

- 2.5 Claim 1 of the main request specifies that the content segment is played out for distribution over the first and second channels until the occurrence of a time slot and that the previously copied advertisement segment *"undergoes play out for distribution over the second channel"*.

Thus, the advertisement is inserted in the stream distributed over the internet but not inserted between content segments distributed over the first set of channels. Page 9, lines 12 to 14, discloses that the encoder switches a switch from delivering over-the-air content to delivering over-the-internet advertisements. This suggests switching the distribution system for delivering advertisements, i.e. that advertisements are not delivered over the air. Hence, during the time slot allotted to advertisements, the content stream

distributed over the air is interrupted. This runs counter to the purpose of the method defined in claim 1, which is a method for providing an uninterrupted content stream.

The description, page 6, lines 24 to 26, discloses that the output of the encoder 24 is input to the transcoder 28 before distributing the contents via the first set of channels. If the advertisements are only played out via the second channel, then there are no advertisements in the stream input to the transcoder 28, i.e. there are no advertisements in the stream output by the encoder 24. This corroborates the board's view that the advertisements are not inserted at the encoder 24 but the content and advertisement streams are switched after encoding.

2.6 Claim 1 of the main request specifies manipulating the content segments of the live television program at the encoder to reduce the length of at least one successive content segment. Due to the inconsistent use of the phrases "*new content segment*" and "*advertisement segment*" it is not clear which segment is "*manipulated*".

According to page 7, lines 15 to 18, the work flow manager 34 (not the encoder 24) manipulates content segments to facilitate the insertion of advertisements.

According to page 9, lines 12 to 18, the encoder 24 shortens the length of the segments by switching a switch from "*Over-the-Air Content*" to "*Over-the-Internet*" advertisements. This casts doubts on whether the encoder "*manipulates*" the data (e.g. by frame dropping) to shorten the length of the content segments (see statement of grounds of appeal, page 3, first

paragraph) or whether it simply overrides the data.

2.7 In view of the above, the board concludes that claim 1 of the main request does not meet the requirements of Article 84 EPC. For this reason alone a patent cannot be granted on the basis of the claims of the main request. Consequently, it is irrelevant whether the subject-matter of claim 1 involves an inventive step over document D6 and, therefore, the request for remittal cannot be allowed.

3. *First to fifth auxiliary requests - clarity (Article 84 EPC)*

3.1 Claim 1 of the first to third auxiliary requests does not meet the requirements of Article 84 EPC for the same reasons as claim 1 of the main request (see points 2.3 to 2.6 above).

3.2 Claim 1 of the fourth and fifth auxiliary requests specifies

"identifying an occurrence of the time slot in the successive content segments during the over-the-internet distribution, and switching, by the first encoder (24), from delivering the successive content segments of the live television program to the new advertisement segment that was previously encoded in the second coding format for play out for distribution over the second channel, whereupon the new advertisement segment is stitched into an output file of the successive content segments".

It is not clear whether the encoder switches between segments of the live television program and the advertisement segment at its input or output (see also

point 2.3 above). Moreover, the verb to "stitch" does not have a well defined meaning in the field of data processing. The adverb "whereupon" suggests that "switching" is immediately followed by "stitching", i.e. that switching between streams is followed by processing an output file. This runs counter to normal data processing, where a stream is generated by reading a file, i.e. the processing of the file precedes the processing of the stream generated by reading the file.

3.3 In view of the above, the board concludes that claim 1 of each of the auxiliary requests does not meet the requirements of Article 84 EPC.

4. *Claim 1 of the fourth and fifth auxiliary requests - added subject-matter (Article 123(2) EPC)*

4.1 According to the consistent interpretation of Article 123(2) EPC by the Enlarged Board of Appeal, any amendment can only be made within the limits of what a skilled person 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 as filed (see G 3/89, OJ EPO 1993, 117; G 11/91, OJ EPO 1993, 125; G 2/10, OJ EPO 2012, 376).

4.2 Claim 1 of the fourth and fifth auxiliary requests specifies *"encoding by a first encoder (24) the successive content segments of the live television program into a first coding format for distribution over a first set of channels for distribution via terrestrial over-the-air broadcast and/or over satellite or cable television and a second coding format for over-the-internet distribution"*.

Thus, claim 1 of the fourth and fifth auxiliary requests specifies that the first encoder outputs a format for distribution via terrestrial over-the-air broadcast and/or over satellite or cable television.

- 4.3 The board does not agree with the appellant (see point XV(a) above) that the application as filed provides a clear and unambiguous basis for the feature cited in point 4.2 above.

The description, page 6, lines 18 to 28, discloses that to "*facilitate the live show 'production' phase, the live show production system 10 of FIG. 1 also includes a first encoder 24 capable of encoding live audio visual content generated by the automated broadcast system 16 using a particular coding format, such as Windows® Media Video (WMV), to facilitate the transmission of such content to a first firewall 26 for subsequent distribution to subscribers across the Internet or one or more other networks, such as LANs and WANs. The transcoding system 28 transcodes the encoded content from the encoder 24 into other formats such as MPEG 2, H.264 and Apple® Quick Time, to name but a few, to facilitate the transmission of content encoded in such formats to the firewall 26 for subsequent distribution via one or more channels, such as terrestrial over-the-air broadcast and/or distribution over satellite and or cable television systems*".

Thus, the first encoder encodes live audio visual content into a first format for distribution via the internet. The output of the first encoder is fed to the input of a transcoder to generate a format for distribution via terrestrial over-the-air broadcast, satellite or cable television. The first encoder does

not encode the content into a format for distribution via terrestrial over-the-air broadcast, satellite or cable television.

Therefore, the passage cited by the appellant does not provide a clear and unambiguous basis for the feature referred to in point 4.2 above.

4.4 In view of the above, claim 1 of the fourth and fifth auxiliary requests does not meet the requirements of Article 123(2) EPC.

5. *Conclusions*

5.1 The appellant's main request for remittal cannot be allowed (see section 2 above).

5.2 Claim 1 of the first to third auxiliary requests does not meet the requirements of Article 84 EPC (see section 3) and claim 1 of the fourth and fifth auxiliary requests does not meet the requirements of Articles 84 and 123(2) EPC (see sections 3 and 4).

For the sake of completeness the board wishes to point out that, in view of these findings, the board need not assess whether the subject-matter of the claims of any of the first to fifth auxiliary requests meets the requirements of Article 56 EPC in view of the disclosure of D6. Therefore, the board sees no reason to consider whether the board itself, exercising its discretion under Article 111(1) EPC, should remit the case to the department of first instance to provide the appellant with a fair opportunity to consider and respond to the objection of lack of inventive step over document D6.

5.3 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