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**Datasheet for the decision of 14 November 2024**

**Case Number:** T 2221/21 - 3.5.04

**Application Number:** 15709574.6

**Publication Number:** 3111650

**IPC:** H04N21/2387, H04N21/422, H04N21/43, H04N21/431, H04N21/81

**Language of the proceedings:** EN

**Title of invention:**
METHODS AND SYSTEMS FOR SUPPLEMENTING MEDIA ASSETS DURING FAST-ACCESS PLAYBACK OPERATIONS

**Patent Proprietor:**
Adeia Guides Inc.

**Opponent:**
RTL Deutschland GmbH

**Headword:**

**Relevant legal provisions:**
EPC Art. 100(a), 56
RPBA 2020 Art. 12(4)

**Keyword:**
Main request (patent as granted) - lack of inventive step (yes)
Auxiliary requests 1, 6, 11 - lack of inventive step (yes)
Auxiliary requests 2 to 5, 7 to 10, 12 to 31 - complexity of amendment (yes) - not admitted

**Decisions cited:**

**Catchword:**

Europäisches Patentamt
European Patent Office
Office européen des brevets

**Beschwerdekammern**

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**Chambres de recours**

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**Case Number: T 2221/21 - 3.5.04**

# D E C I S I O N
# of Technical Board of Appeal 3.5.04
# of 14 November 2024

| | |
|---|---|
| **Appellant:** (Opponent) | RTL Deutschland GmbH<br>Picassoplatz 1<br>50679 Köln (DE) |
| **Representative:** | Kiani, Nassim<br>Kiani & Springorum<br>Patent- und Rechtsanwälte<br>Taubenstrasse 4<br>40479 Düsseldorf (DE) |
| **Respondent:** (Patent Proprietor) | Adeia Guides Inc.<br>3025 Orchard Parkway<br>San Jose, CA 95134 (US) |
| **Representative:** | Haley Guiliano International LLP<br>26-28 Bedford Row<br>London WC1R 4HE (GB) |
| **Decision under appeal:** | **Decision of the Opposition Division of the European Patent Office posted on 15 November 2021 rejecting the opposition filed against European patent No. 3111650 pursuant to Article 101(2) EPC.** |

**Composition of the Board:**

| | |
|---|---|
| **Chair** | B. Willems |
| **Members:** | A. Seeger |
| | G. Decker |

## Summary of Facts and Submissions

I. The appeal is against the opposition division's decision dated 15 November 2021 rejecting the opposition against European patent No. 3 111 650.

II. The mention of the grant of European patent No. 3 111 650 ("the patent" or "the patent as granted") was published in the European Patent Bulletin of 28 November 2018. The proprietor of the patent is Adeia Guides Inc. (patent proprietor).

III. Notice of opposition to the patent was filed by RTL Deutschland GmbH (opponent). The ground for opposition was that the subject-matter of the patent was not patentable under Articles 52 and 56 EPC (Article 100(a) EPC), because it did not involve an inventive step.

IV. With its reply to the notice of opposition the patent proprietor filed a first and a second auxiliary request. These requests were replaced by a first and a second auxiliary request filed with the patent proprietor's letter dated 26 March 2021. The newer versions of the auxiliary requests were maintained throughout the remainder of the opposition proceedings.

V. The opposition division decided to reject the opposition.

The documents cited in that decision included the following:

D9: US 2010/0125875 A1

D10: US 2012/0311628 A1

D13: L. Soares et al., "Ginga-NCL: Declarative Middleware for Multimedia IPTV Services", IEEE Communications Magazine, vol. 48, No. 6, June 2010, pages 74 to 81, XP011310465

VI. The opponent (appellant) filed notice of appeal and a statement of grounds of appeal, in which it requested that the decision under appeal be set aside and that the patent be revoked.

VII. In its reply to the statement of grounds of appeal, the patent proprietor (respondent) requested that the appeal be dismissed and that the patent be maintained as granted and as upheld by the opposition division (main request). The respondent filed auxiliary requests 1 to 31, stating that auxiliary request 1 was identical to the first auxiliary request referred to in the decision under appeal and that auxiliary request 6 was identical to the second auxiliary request referred to in the decision under appeal.

VIII. By letter dated 22 December 2023, the appellant filed the following document:

E8: C. Price, "Table Lookup Techniques", Computing Surveys, vol. 3, No. 2, June 1971,

submitted further arguments and requested that auxiliary requests 2 to 5, 7 to 10 and 12 to 31 filed by the respondent not be admitted into the appeal proceedings.

IX. By letter dated 19 March 2024, the respondent submitted further arguments and requested that document E8 not be admitted into the appeal proceedings.

X. By letter dated 31 May 2024, the appellant submitted further arguments.

XI. The board issued a summons to oral proceedings and a communication under Article 15(1) RPBA. In this communication, the board set out its interpretation of claim 1 of the patent as granted and gave the following preliminary opinion.

(a) The parties were invited to submit modified formulations of the objective technical problem. Based on these formulations, obviousness of the subject-matter of claim 1 of the patent as granted and claim 1 of the first auxiliary request in view of document D9 and either common general knowledge or document D10 would be discussed during the oral proceedings.

(b) The board was inclined not to admit auxiliary requests 2 to 5, 7 to 10 and 12 to 31 into the appeal proceedings under Article 12(4) RPBA.

(c) For the assessment of inventive step of claim 1 of auxiliary request 6, the board felt inclined to agree with the appellant that document D13 disclosed the distinguishing feature of presenting the supplemental content on a second screen device and that the person skilled in the art would have applied this feature to a method according to document D9. Similar remarks applied to claim 1 of auxiliary request 11.

XII. In its letter dated 30 October 2024, the appellant agreed with the board's interpretation of claim 1 of the patent as granted as well as its analysis of the disclosure of document D9 and the distinguishing features identified in the preliminary opinion. The appellant formulated the objective technical problem as "*dem Zuschauer einen rascheren Überblick über den Inhalt eines Medienobjekts und dessen inhaltliche Bezüge zu verschaffen*", i.e. to provide the viewer with a quicker overview of the content of a media object and its content-related references. Paragraph [0055] of document D9 showed the skilled person that the F-search function was available during the fast-access playback operation known from common general knowledge. Document D10 disclosed fast-access playback for supplemental content such as closed captions. The person skilled in the art would have combined the teachings of documents D9 and D10 to arrive at the subject-matter of claim 1 of the patent as granted.

XIII. In its letter dated 31 October 2024, the respondent disputed part of the board's interpretation of claim 1 of the patent as granted. The respondent did not agree with the board's preliminary assessment that document D9 disclosed all the features of claim 1 except for the parts relating to fast-access playback. The respondent primarily maintained its formulation of the objective technical problem as "*to enhance the user experience of a media asset which uses supplemental content*", but also suggested an alternative objective technical problem, namely "*to extend the provision of supplemental content generated for presentation to a user in response to a user input while the user is playing a media asset*". The respondent concluded that the subject-matter of claim 1 of the patent as granted was not obvious starting from document D9. It submitted

that, since it had indicated a basis for the amendments to the claims of auxiliary requests 2 to 5, 7 to 10 and 12 to 31, these requests should be admitted into the appeal proceedings.

XIV. On 14 November 2024 the board held oral proceedings.

The appellant's final request was that the decision under appeal be set aside and that the patent be revoked.

The respondent's final requests were a main request that the appeal be dismissed, i.e. that the patent be maintained as granted, or alternatively, that the patent be maintained on the basis of one of auxiliary requests 1 to 31 filed with the reply to the appeal.

XV. Claim 1 of the patent as granted (main request) reads as follows:

"A method for supplementing media assets during fast-access playback operations, the method comprising:
receiving a user input while a media asset is subject to a fast-access playback operation;
determining a progression point in the media asset when the user input was received;
cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation the supplemental content while the media asset continues to be subject to the fast-access playback operation."

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

"A method for supplementing media assets during fast-access playback operations, the method comprising:
receiving a user input after a fast-access playback operation has been initiated on a media asset and while ~~a~~ the media asset is subject to ~~a~~ the fast-access playback operation;
determining a progression point in the media asset when the user input was received;
cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation the supplemental content while the media asset continues to be subject to the fast-access playback operation."

XVII. Claim 1 of auxiliary request 2 reads as follows (features added compared with claim 1 of the main request are underlined):

"A method for supplementing media assets during fast-access playback operations, the method comprising:
receiving a user input while a media asset is subject to a fast-access playback operation;
determining a progression point in the media asset when the user input was received;
cross-referencing the progression point with a database structured as a look-up table listing media content associated with different progression points in the

media asset to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation the supplemental content while the media asset continues to be subject to the fast-access playback operation."

XVIII. Claim 1 of auxiliary request 3 reads as follows (features added compared with claim 1 of the main request are underlined and deleted features are ~~struck through~~):

"A method for supplementing video media assets during fast-access playback operations, the method comprising:
applying a fast-access playback operation to a video media asset; and
by means of a media guidance application:
in response to the fast-access playback operation being applied, generating and displaying a notification that supplemental content is available for the media asset;
receiving a user input while ~~a~~ the media asset is subject to ~~a~~ the fast-access playback operation;
determining a progression point in the media asset when the user input was received;
cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation the supplemental content while the media asset continues to be subject to the fast-access playback operation."

XIX. Claim 1 of auxiliary request 4 reads as follows (features added compared with claim 1 of the main request are underlined and deleted features are ~~struck through~~):

"A method for supplementing video media assets during fast-access playback operations, the method comprising:
applying a fast-access playback operation to a video media asset; and
by means of a media guidance application:
receiving a first user input while the media asset is subject to the fast-access playback operation;
in response to the first user input, generating for presentation a notification that supplemental content is available, wherein the notification lists one or more types of available supplemental content for a current progression point in the media asset during the fast-access playback operation;
receiving a second user input while the~~a~~ media asset is subject to the~~a~~ fast-access playback operation to trigger the presentation of one of the types of available supplemental content;
determining a progression point in the media asset when the second user input was received;
cross-referencing the determined progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the determined progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation the determined supplemental content while the media asset continues to be subject to the fast-access playback operation."

XX. Claim 1 of auxiliary request 5 reads as follows (features added compared with claim 1 of the main request are underlined and deleted features are ~~struck through~~):

"A method for supplementing media assets during fast-access playback operations, the method comprising:
applying a fast-access playback operation to a media asset; and
by means of a media guidance application:
in response to the fast-access playback operation being applied, generating and displaying a notification that lists one or more types of available supplemental content for a current progression point in the media asset during the fast-access playback operation;
receiving a user input while ~~a~~ the media asset is subject to ~~a~~ the fast-access playback operation to trigger the presentation of one of the types of available supplemental content;
determining a progression point in the media asset when the user input was received;
cross-referencing the determined progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the determined progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation the determined supplemental content while the media asset continues to be subject to the fast-access playback operation."

XXI. Claim 1 of auxiliary request 6 reads as follows (features added compared with claim 1 of the main request are underlined):

"A method for supplementing media assets during fast-access playback operations, the method comprising:
receiving a user input while a media asset is subject to a fast-access playback operation initiated on a first user device;
determining a progression point in the media asset when the user input was received;
cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation; and
generating for presentation on a second user device the supplemental content while the media asset continues to be subject to the fast-access playback operation."

XXII. According to the respondent, auxiliary requests 7 to 31 were combinations of auxiliary requests 1 to 6 as follows (see the reply to the appeal, section 1):

Auxiliary request 7 = 1 + 2
Auxiliary request 8 = 1 + 3
Auxiliary request 9 = 1 + 4
Auxiliary request 10 = 1 + 5
Auxiliary request 11 = 1 + 6
Auxiliary request 12 = 1 + 2 +3
Auxiliary request 13 = 1 + 2 + 4
Auxiliary request 14 = 1 + 2 + 5
Auxiliary request 15 = 1 + 2 + 6
Auxiliary request 16 = 1 + 3 + 6
Auxiliary request 17 = 1 + 4 + 6
Auxiliary request 18 = 1 + 5 + 6
Auxiliary request 19 = 1 +2 + 3 + 6
Auxiliary request 20 = 1 + 2 + 4 + 6
Auxiliary request 21 = 1 + 2 + 5 + 6

Auxiliary request 22 = 2 + 3
Auxiliary request 23 = 2 + 4
Auxiliary request 24 = 2 + 5
Auxiliary request 25 = 2 + 6
Auxiliary request 26 = 2 + 3 + 6
Auxiliary request 27 = 2 + 4 + 6
Auxiliary request 28 = 2 + 5 + 6
Auxiliary request 29 = 3 + 6
Auxiliary request 30 = 4 + 6
Auxiliary request 31 = 5 + 6

XXIII. The features of claim 1 of the patent as granted are referenced as follows:

M1.0 A method for supplementing media assets during fast-access playback operations, the method comprising:

M1.1 receiving a user input while a media asset is subject to a fast-access playback operation;

M1.2 determining a progression point in the media asset when the user input was received;

M1.3 cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation; and

M1.4 generating for presentation the supplemental content while the media asset continues to be subject to the fast-access playback operation.

## Reasons for the Decision

1. The appeal is admissible.

2. Patent as granted (main request) - interpretation of claim 1

2.1 According to the opposition division's interpretation of feature M1.3, there was a single instance of cross-referencing between the progression point and the database listing media content associated with different progression points in the media asset. As a result of this cross-referencing, two types of supplemental content were determined: a first one associated with the progression point and a second one associated with the portion of the media asset that was subject to the fast-access playback operation (see decision under appeal, point 3.2.2).

2.2 The appellant did not address this issue on appeal.

2.3 The respondent interpreted feature M1.3 as meaning that there was a single instance of cross-referencing of the progression point with the database listing media content associated with different progression points in the media asset. As a result of this cross-referencing, a single supplemental content was determined, which was associated with both the progression point and the portion of the media asset that was subject to the fast-access playback operation. As claimed, the progression point was within the portion of the media asset that was subject to the fast-access playback operation (see reply to the appeal, points 3.2.1 and 3.2.2).

2.4 For the following reasons, the board agrees with the respondent's interpretation.

A natural reading of claim 1 links the expressions "*the progression point*" and "*a portion of the media asset that is subject to the fast-access playback operation*", which are connected by the word "*and*", to the immediately preceding part of the definition of feature M1.3, namely to the phrase "*determine supplemental content associated with*", rather than to earlier parts of the definition.

For the board, the clear, direct meaning of feature M1.3 is thus that a single supplemental content is determined, which is associated with both the progression point and the portion of the media asset that is subject to the fast-access playback operation.

2.5 The respondent further addressed the issue of how to interpret the formulation "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset*" and referred to paragraph [0093] of the patent (see reply to the appeal, section 3.2, from the third full paragraph on page 5).

According to paragraph [0093] of the patent the information in the database is "e.g., *related to content of the media asset at different progression points*".

The board understands this statement in the context provided by paragraphs [0017] and [0080] of the patent, which the respondent cited in section 3.2, headed "Interpretation", of its reply.

Paragraph [0017] reads in the relevant part: "*[a] media asset may include one or more progression points during its play length. For example, if the media asset is a video, a progression point may refer to a particular frame of the video*".

Paragraph [0080] reads in the relevant part: "*determining that supplemental content is available at the fifty-second mark in a media asset*".

This means that supplemental content is available at a particular point, i.e. at a particular frame in the case of a video, but not at other points/frames.

The board thus understands feature M1.3 as meaning that the "*database listing media content associated with different progression points in the media asset*" contains, for example, in the case of a video, media content associated with particular frames but not with all of the frames.

Feature M1.3 further mentions "*the progression point*", i.e. the progression point determined when the user input was received. The board agrees with the respondent that this is "*the progression point at the time of user input*" (see reply to the appeal, paragraph bridging pages 5 and 6). In view of paragraphs [0012], [0068], [0090] and [0091], the board interprets this progression point in the case of a video as the current frame when the user input is received.

According to feature M1.3 this current frame, e.g. number 500, has to be cross-referenced with the "*database listing media content associated with different progression points in the media asset*". In

the example case of a video, this will be media content associated with, e.g., frames 10, 200, 400 and 1000.

Hence, the board understands that the process of "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point*" is not a simple look-up process. Instead, it requires an intermediate step of matching, in the case of a video, the current frame with the relevant progression point in the database.

Therefore, the board does not agree with the respondent's statement that "*[t]he derivation of supplemental content based on the progression point at the time of the user input does not require any intermediate step*" (see reply to the appeal, paragraph bridging pages 5 and 6).

The board is of the opinion that the presence of an intermediate step is further evidenced by paragraph [0093] of the patent, which discloses as follows: "*filter the information ... in the database based on the determined progression point to output supplemental content ... associated with the progression point*". A "*filter*" operation clearly goes beyond a simple look-up process.

2.6 The respondent argued that the formulation in paragraph [0017] of the published patent "*A media asset may include one or more progression points during its play length*" together with the statement "*if the media asset is a video, a progression point may refer to a particular frame of the video*" meant that each frame of a video was a progression point.

The respondent argued that paragraph [0093] described a mere look-up table to retrieve (filter out) data related to an index entry, namely a frame number, from the database. For each frame, there was a database entry linking the frame number to a supplemental content for that frame. Hence, to determine supplemental content for a specific frame, nothing more was needed than to input a frame number into the database and to look up the related supplemental content.

2.7 The board is not convinced by these arguments, for two reasons.

Firstly, paragraph [0017] states that a video (which, by definition, must have multiple frames) may have a single progression point. This means that not all frames are progression points.

Secondly, paragraph [0093] explains that the information in the database is "*related to content of the media asset at different progression points*". The use of the term "*different progression points*" implies that information in the database is not available for all frames but only for some progression points.

2.8 In view of the above, the board does not interpret the feature in claim 1 of "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point*" as a simple look-up process but, instead, as requiring an intermediate step of matching, in the case of a video,

the current frame number with the relevant progression point in the database.

3. Patent as granted (main request) - inventive step (Article 100(a) EPC)

3.1 The opposition division considered document D9 to represent the closest prior art (see decision under appeal, point 3.3.1, first sentence). This was not contested by the parties (see statement of grounds of appeal, page 2, first paragraph: "*in Ansehung der D9 als nächstliegendem Stand der Technik*", and reply to the appeal, point 3.3.1: "*the Respondent accepts that D9 represents the 'closest' prior art*").

3.2 The opposition division held that document D9 disclosed the following features (see decision under appeal, point 3.3.1):

| | |
|---|---|
| M1.0 | A method for supplementing media assets during ~~fast-access playback~~ operations (par. [0009]), the method comprising: |
| M1.1 | receiving a user input while a media asset is subject to ~~a fast-access playback~~ operation (par. [0027], 1st and second sentence: F-search); |
| M1.2 | determining a progression point in the media asset when the user input was received (par. [0027], the server performs a search for supplemental content that pertains to the context of the particular content being consumed by the consumer at that time; par. [0032], first sentence: the point at which the game was paused; par. [0056]: the media may be automatically paused upon activation of the F-search feature); |

| | |
|---|---|
| M1.3 | cross-referencing ~~the progression point~~ with a database listing media content ~~associated with different progression points in the media asset~~ to determine supplemental content associated ~~with the progression point and~~ with a portion of the media asset (par. [0036], first sentence; the F-search feature detects the context in which the F-search feature was invoked and uses the contextual information to search for supplemental contents) ~~that is subject to the fast-access playback operation~~; and |
| M1.4 | generating for presentation the supplemental content (par. [0029], first sentence; par. [0056], first sentence; Fig. 2) ~~while the media asset continues to be subject to the fast-access playback operation~~. |

3.3 It is common ground that document D9 does not disclose a fast-access playback operation (see statement of grounds of appeal, page 15, first full paragraph: "*es der D9 gegenüber dem Streitpatentgegenstand nur an einer Schnellzugriffs Wiedergabe-Operation fehlt*", and reply to the appeal, point 3.3.5).

Furthermore, it is common ground that document D9 discloses the parts of features M1.0, M1.1 and M1.4 which do not relate to the fast-access playback operation (see statement of grounds of appeal, page 15, first full paragraph, and reply to the appeal, point 3.3.5).

3.4 The first issue under discussion is whether document D9 discloses feature M1.2, i.e. whether it discloses determining a progression point in the media asset when the user input is received.

3.4.1 The opposition division referred to paragraph [0027] of document D9, which discloses that when the F-search feature is invoked "*the server performs a search for supplemental content that pertains to the context of the particular content being consumed by that consumer at that time*".

The opposition division held that paragraph [0027] thus implied the determination of a time. Furthermore, the time bar 205 shown in Figure 2 of D9 illustrated a point at which the game was paused in relation to the current real-time of game broadcast. This implied a "progression point" within the live game broadcast (see decision under appeal, point 3.3.2.1).

3.4.2 The respondent argued that the term "*the particular content being consumed by that consumer at that time*" in paragraph [0027] of D9 merely referred to the current content such as the Phillies vs Mets baseball game and did not also refer to a sub-asset within this current content. The respondent further argued that, in the example given in D9, there was no progression point allowing fast-access playback because it was a live broadcast. The timeline shown in Figure 2 of D9 only related to a time-shifted viewing (see reply to the appeal, point 3.3.2.1).

3.4.3 The appellant argued that, according to paragraphs [0032] and [0056] of D9, the live broadcast shown in Figure 2 could be paused and resumed. Hence, after being paused and resumed once, it would no longer be a live broadcast but a playback from a storage medium. The appellant further argued that document D9 also disclosed delivering content on demand (see paragraph [0019] of D9) and carrying out the F-search function within such content (see

paragraph [0051] of D9). The appellant submitted that the generated supplemental content was clearly time-related, and it referred to paragraphs [0022], [0024] and [0030] (see reply to the appeal, pages 9 to 14).

3.4.4 The board agrees with the appellant that document D9 discloses the activation of the F-search feature not only during a live broadcast but also during a film (see, e.g., paragraph [0051]: "*when the F-Search feature is activated during the viewing of any particular light saber fight scene within a Star Wars movie*"). Furthermore, the board agrees with the appellant that the generated supplemental content in document D9 relates to sub-assets within the content (see paragraph [0024]: "*a media asset typically can conceptually be broken down into a plurality of segments at the sub-asset level, each having a cohesive context or theme*", paragraph [0022]: "*the supplemental content is offered on a sub-asset level*" and paragraph [0030]: "*supplemental content relevant to the program and scene*"). Since it is determined which sub-asset is playing at the time of invoking the F-search, the progression point of the playback of the content at the time of invoking the search must be detected.

3.4.5 The respondent argued that there was no evidence in document D9 that, for the F-search, the progression point needed to be determined. The F-search for supplemental content was context-based. The progression point reached when the F-search was invoked was irrelevant to the context in cases where the same context was applicable to multiple sub-assets. Furthermore, the context might be derived based on metadata accompanying the film. The system might be

triggered by a user input invoking the F-search to read a "context" data field in the corresponding metadata (see the respondent's letter dated 31 October 2024, point 4.4.4).

The board is not convinced by these arguments for the following reasons. Even if the same context applies to several sub-assets, it must be determined which context applies to the sub-asset playing at the time of invoking the F-search. According to document D9, information about the context may indeed be found in metadata contained in a video stream (see D9, paragraph [0058]: "*responsive to the user activating the F-Search feature ... software performs an analysis to determine context ... this may include a regression analysis of the available data about the scene. Such data may include metadata contained in the stream*"). However, the metadata of the scene will vary from scene to scene and, therefore, the progression point of the playback of the content at the time of invoking the F-search must be determined in order to identify the current scene and its related metadata.

3.4.6 The respondent further argued that it was not necessary to determine the progression point in order to access the correct metadata of the current scene. As a film progressed from scene to scene the related metadata of the current scene would automatically become available.

The board is not convinced by this further argument, because the progression of the film from scene to scene and synchronised availability of the current metadata can only happen if the film's current progression point is determined.

3.4.7 In view of the above, the board finds that document D9 discloses feature M1.2.

3.5 The second issue under discussion is to which extent document D9 discloses feature M1.3, i.e. whether document D9 discloses cross-referencing the progression point with a database listing media content associated with different progression points in the media asset.

3.5.1 The opposition division took the view that a two-step search, based on a point in time referred to in paragraph [0027] of D9, from which a context was determined and then used to obtain supplemental content, did not correspond to the cross-referencing of the progression point with a database (see decision under appeal, point 3.3.4, first three paragraphs).

Furthermore, the opposition division took the view that time stamps included in the metadata of the media asset did not correspond to progression points as defined in claim 1. Hence, a search based on these time stamps did not anticipate feature M1.3 (see decision under appeal, point 3.3.4, last paragraph).

3.5.2 The appellant argued that a two-step search, in which the relevant context was determined on the basis of the current progression point and supplemental content was then determined on the basis of this relevant context (see D9, paragraphs [0027] and [0036]), meant that the search for supplemental content was based on the progression point. Hence, this search anticipated "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the*

*progression point*" (see statement of grounds of appeal, pages 3 to 11).

Furthermore, the appellant argued that, according to document D9, the current time when the search feature was invoked could be compared with metadata containing time stamps identifying the beginnings and ends of segments within a programme (see D9, paragraph [0041]). This would lead to the determination of a context of this segment, which could be used to determine supplemental media content using a database (see statement of grounds of appeal, page 11, last paragraph, to page 14, second paragraph).

3.5.3 The respondent argued that in document D9 it was the determined context rather than any element of time that was used to look up supplemental content. This was clearly different from the claimed cross-referencing of a progression point with a database, which involved only a simple correlation between a progression point and a corresponding entry in a database (see reply to the appeal, page 10, first paragraph, to page 11, third paragraph).

The respondent argued that the time stamps in the metadata according to paragraph [0041] of document D9 did not constitute progression points as defined in feature M1.2 of claim 1. The respondent argued that the use of any point in time of the programme to establish the context of the search (which context is only then used as a basis for the search) did not anticipate the direct use of the progression point to extract specific supplemental content from a corresponding location in a database (see reply to the appeal, section headed "The 'para 41 argument'", on pages 11 and 12).

3.5.4 The board takes the view that, according to paragraphs [0027] and [0036] of document D9, it is the context (determined from a point in time when the F-search was invoked) that is used to search for supplemental content. This search may be carried out using a database, but such a database will connect the context with suitable supplemental content. Such a database is thus not a "*database listing media content associated with different progression points in the media asset*".

The board takes the view that the same holds true for the time stamps identifying the beginnings and ends of segments within a programme. A point in time when an F-search is invoked may be matched with these time stamps to determine a scene and its context. However, it is then this context that is used to search for supplemental content. This may be realised using a database. This database will connect the context with suitable supplemental content. Such a database is thus not a "*database listing media content associated with different progression points in the media asset*".

Therefore, the board is not convinced that the disclosure in paragraphs [0027], [0036] and [0041] of document D9 anticipates "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset*" (see point 3.5 above).

3.5.5 The board also considered the disclosure in paragraph [0055] of document D9 cited by the appellant and the corresponding arguments (see the appellant's letter dated 30 October 2024, page 3, second paragraph, to page 5, first paragraph).

Paragraph [0055] reads in the relevant part: "*Search results can be generated at least partially in real time based on analyzed context and analyzed user preferences. However, the media provider also may pre-identify particular portions of particular media assets as being particularly suitable for supplemental content and, as previously mentioned, may have pre-generated supplemental content particularly relating to such scenes*".

This paragraph sets out that, for certain portions of media assets, supplemental content is pre-generated. Evidently, this pre-generated supplemental content should be presented once the F-search feature is activated during such portions. This is shown by use of the word "*However*", which means that the previously mentioned context-based search is not applied. Instead, if it is determined that the F-search feature is activated during a scene for which pre-generated supplemental content is available, this pre-generated supplemental content is simply presented. This implies the use of a database linking scene IDs to the pre-generated supplemental content.

The board takes the view that this process anticipates "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset to determine supplemental content associated with the progression point*", because, as set out under point 2.5 above, "*cross-referencing*" includes the option of an intermediate step, i.e. linking a time when the F-search feature is invoked to a scene ID. Furthermore, a database linking scene IDs and pre-generated supplemental content is a database listing media

content associated with different progression points in the media asset.

Therefore, the board is of the opinion that paragraphs [0055] and [0027] of document D9 together disclose "*cross-referencing the progression point with a database listing media content associated with different progression points in the media asset*" (see point 3.5 above).

3.5.6 The respondent argued that throughout document D9 the F-search was based on a determined context. That context could be determined based on metadata (see paragraph [0058] of D9). Paragraph [0055] repeated this by stating that search results "*can be generated ... based on analyzed context*". A metadata packet from which the context could be determined would automatically come along with a currently playing content. In a system according to document D9 there was thus no need to determine a progression point and cross-reference the progression point with a database.

The board is not convinced by this argument, because (as set out under point 3.4.6 above) the determination of a progression point is a prerequisite to determining where one is within a video and obtaining the correct metadata related to a current scene.

3.5.7 The respondent argued that the word "*However*" in paragraph [0055] was not to be understood as expressing a contrast between a context-based search and a mapping from a scene ID to specific related content that had been pre-generated for such a scene.

Instead, the word "*However*" expressed a contrast between what was stated at the beginning of

paragraph [0055], namely that the F-search feature was available at any time, and the subsequent situation, in which the user was specifically alerted via an icon indicating that interesting supplemental content for certain scenes was available.

The board is not convinced by this argument because, when such an icon is presented, the user also still has the freedom to invoke, or not to invoke, the F-search, meaning that the F-search function is available at any time.

3.5.8 The respondent argued that paragraph [0055] was not very clear. It was thus not possible for the skilled person to directly and unambiguously derive anything from it.

The board is not convinced by this argument either. The board is of the opinion that one thing that can be directly and unambiguously derived from paragraph [0055] is that, if a user activates the F-search function during a portion for which an operator has pre-generated supplemental content, the system has to make sure that the user is presented with exactly that pre-generated supplemental content. This cannot be achieved if there is a context-based search, which could yield any kind of result. To present the exact content, a link (in the form of a database linking scene IDs to supplemental content) from a scene ID to the pre-generated supplemental content for that exact scene is indispensable.

3.5.9 The board is thus of the opinion that document D9 discloses cross-referencing the progression point with a database listing media content associated with different progression points in the media asset.

3.6 In view of the above, the board finds that document D9 discloses all the features of claim 1 except for the parts relating to fast-access playback.

3.7 The objective technical problem

3.7.1 The correct procedure for formulating the objective technical problem is to choose a problem based on the technical effect of exactly those features distinguishing the claim from the prior art that is as specific as possible without containing elements or pointers to the solution (see Case Law of the Boards of Appeal of the European Patent Office, 10th edition, 2022, "Case Law", I.D.4.2.1).

3.7.2 The respondent submitted that a first objective technical problem may be formulated as "*to enhance the user experience of a media asset which uses supplemental content*". The respondent argued that this objective technical problem was not too generic but appropriately generic, given the lack of relevance of the prior art. In particular, document D9 did not hint at (or indicate any need for) determining the progression point in the asset in cases where the context forming the basis of the F-search was most likely to be contained in the metadata and the same context could apply to multiple segments in the same asset and yield identical results (see reply to the appeal, section 3.3.6, and the respondent's letter dated 31 October 2024, point 4.7.2).

3.7.3 It follows from the respondent's arguments that, in the formulation of this first objective technical problem, the presence of further distinguishing features (other than the one acknowledged under point 3.3 above) was

assumed. However, this contrasts with the board's finding under point 3.6 above. According to this finding the only distinguishing feature is that document D9 does not disclose a fast-access playback operation.

In view of this finding, the board is not convinced that the first objective technical problem provided by the respondent is appropriate, because it is too generic and does not address the technical effect of the distinguishing feature, i.e. the effect of using a fast-access playback operation. The user experience of a media asset which uses supplemental content can be enhanced in many ways that have nothing to do with a fast-access playback operation.

3.7.4 The respondent formulated a second objective technical problem as "*to extend the provision of supplemental content generated for presentation to a user in response to a user input while the user is playing a media asset*" (see the respondent's letter dated 31 October 2024, point 4.7.3).

The appellant argued that this formulation was too generic. Extending the provision of supplemental content encompassed other sources of supplemental content and other ways in which the supplemental content could be provided. This had nothing to do with the technical effects of a fast-access playback operation.

The respondent submitted that the objective technical problem had to be formulated in such a generic manner as not to contain a pointer to the solution.

The board agrees with the appellant because the wording "*extend the provision of supplemental content*" does not address the specific effects of fast-access playback, which include providing a user with a quicker overview of a media asset.

3.7.5 The appellant formulated the objective technical problem as "*dem Zuschauer einen rascheren Überblick über den Inhalt eines Medienobjekts und dessen inhaltliche Bezüge zu verschaffen*" (see the appellant's letter dated 30 October 2024, page 5, penultimate paragraph), i.e. to provide the viewer with a quicker overview of the content of a media object and its content-related references.

The respondent argued that in this problem the wording "*rascheren Überblick verschaffen*", i.e. to provide a quicker overview, contained a pointer to the solution, namely to fast-access playback.

The appellant argued that fast-access playback, in particular fast-forward playback, was just one of many ways to obtain a quicker overview. Thus, the problem did not contain a pointer to the solution.

The board agrees with the formulation of the objective technical problem proposed by the appellant. This problem includes the specific technical effect of fast-access playback of providing a user with a quicker overview of a media asset but is still generic enough to not contain a pointer to the solution of fast-access playback.

3.8 Obviousness

3.8.1 It is undisputed that fast-forward playback (as one example of a fast-access playback operation) is common general knowledge in the technical field of video reproduction.

3.8.2 The appellant argued that the person skilled in the art, faced with the objective technical problem formulated above, would have chosen the known option of fast-forward playback to obtain a quicker overview of the content of a media asset. This was, in particular, the case because paragraph [0055] of document D9 taught that "*the F-Search feature is available at any time during the consumption of any media asset*". Hence, the person skilled in the art would have understood that the F-search function was also available during a fast-forward playback (see the appellant's letter dated 30 October 2024, paragraph bridging pages 5 and 6).

3.8.3 The respondent argued that it was not obvious, based on common general knowledge, to receive a user input while a media asset was subject to fast-forward playback. It was not evident how a user could identify a suitable progression point if the media asset was in fast-forward playback.

3.8.4 The board is not convinced by the respondent's argument because claim 1 merely requires the receiving of a user input while a media asset is subject to fast-access playback operation. For example, pressing a button is always possible, without any problems, for a user. The claim does not contain any further specific features concerning how to convert the point in time of a user input into a progression point, which might be more difficult at, e.g., a higher reproduction speed.

3.8.5 The board thus finds that the subject-matter of claim 1 is rendered obvious by the disclosure of document D9 combined with the common general knowledge of the person skilled in the art.

3.9 In view of the above, the board finds that the subject-matter of claim 1 of the patent as granted does not involve an inventive step within the meaning of Article 56 EPC. Therefore, the ground for opposition under Article 100(a) EPC prejudices the maintenance of the patent as granted.

4. Auxiliary request 1 - admittance (Article 12(4) RPBA)

This auxiliary request of the respondent is identical to the first auxiliary request maintained in the first-instance opposition proceedings (see decision under appeal, page 3). This was not contested by the appellant. Hence, auxiliary request 1 is part of the appeal proceedings under Article 12(4), first sentence, RPBA.

5. Auxiliary request 1 - inventive step (Article 56 EPC)

5.1 Claim 1 of auxiliary request 1 differs from claim 1 of the main request only in that it further specifies that a user input is received after a fast-access playback operation has been initiated on a media asset and while the media asset is subject to the fast-access playback operation.

5.2 The subject-matter of claim 1 of the main request has already been understood by the board in this manner. Hence, the additional features of claim 1 of auxiliary request 1 do not change the outcome of the

inventive-step assessment in relation to that of claim 1 of the main request.

5.3 This was also the view of the respondent (see reply to the appeal, page 15, first paragraph, last sentence: "*It does not change the arguments under Article 100(a) EPC set out above in respect of the Main Request*").

5.4 Therefore, the board finds that the subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step within the meaning of Article 56 EPC, for the same reasons as those set out under point 3. for claim 1 of the main request.

6. Auxiliary requests 2 to 5 - admittance (Article 12(4) RPBA)

6.1 Auxiliary requests 2 to 5 were filed by the respondent during the appeal proceedings. Hence, these auxiliary requests are an amendment to the respondent's appeal case within the meaning of Article 12(4), first sentence, RPBA. Under Article 12(4), second sentence, RPBA, any such amendment may be admitted only at the discretion of the board.

6.2 Under Article 12(4), fourth sentence, RPBA, the respondent has to indicate the basis for the amendment in the application as filed.

Under Article 12(4), fifth sentence, RPBA, the board is to exercise its discretion in view of, inter alia, the complexity of the amendment and the need for procedural economy.

6.3 For auxiliary requests 2 to 5, the respondent provided a basis for the amended features per se, but it did not

substantiate why these amended features together with the part of feature M1.3 reading "*cross-referencing the progression point ... to determine supplemental content associated with the progression point and with a portion of the media asset that is subject to the fast-access playback operation*" were directly and unambiguously derivable from the application as filed.

6.4 Feature M1.3 (as interpreted by the board - see point 2.4 above) requires the supplemental content to be associated with both the progression point and a portion of the media asset that is subject to the fast-access playback operation.

Hence, the determined supplemental content may differ from the content if only the progression point is considered. This is because a context at the progression point (e.g. two light sabre fighters A and B) may differ from a context of a portion of the media asset that is subject to the fast-access playback operation (e.g. the light sabre fighter A).

However, paragraph [0077] of the description as filed provides a basis for three distinct alternatives, namely to determine supplemental content

(a) associated with the media asset in general
(b) associated with a current progression point
(c) associated with a portion of the media asset that has been subject to the fast-access playback operation.

Furthermore, paragraph [0020] of the description as filed states that supplemental content is generated for display related to the progression point of the media asset at which the user input was received while the fast-forward or rewind operation continued. Again here,

the supplemental content only depends on the situation at the progression point.

6.5 Therefore, the board is of the opinion that it would at least require a complex discussion to ascertain whether there was a basis for determining supplemental content such that it was associated with both the progression point and the portion of the media asset subject to fast-access playback operation.

Such a complex discussion would be contrary to the need for procedural economy.

6.6 There were no comments by the parties.

6.7 Therefore, the board exercises its discretion under Article 12(4) RPBA by not admitting auxiliary requests 2 to 5 into the appeal proceedings.

7. Auxiliary request 6 - admittance (Article 12(4) RPBA)

This auxiliary request of the respondent is identical to the second auxiliary request maintained in the first-instance opposition proceedings (see decision under appeal, page 3). This was not contested by the appellant. Hence, auxiliary request 6 is part of the appeal proceedings under Article 12(4), first sentence, RPBA.

8. Auxiliary request 6 - inventive step (Article 56 EPC)

8.1 Claim 1 of auxiliary request 6 differs from claim 1 of the main request only in that it further specifies that the fast-access playback operation is initiated on a first user device while the supplemental content is generated for presentation on a second user device.

8.2 The appellant took the view that these aspects constituted a further distinguishing feature in relation to the disclosure of document D9 in addition to that identified under point 3.6 above. The objective technical problem related to this further distinguishing feature was to avoid programme playback being disturbed by supplemental content being presented. This objective technical problem was a partial problem independent of the problem related to the feature of the fast-access playback operation. The person skilled in the art would have found a solution to this problem in document D13, namely by presenting supplemental content on a second device (see D13: Figure 2 and page 78, left column, first full paragraph, to page 78, right column, fourth full paragraph). The person skilled in the art would thus have applied this solution to a system according to document D9 and would have directly arrived at the further distinguishing feature (see the appellant's letter dated 22 December 2023, section headed "Zum Hilfsantrag 6 - vormals Hilfsantrag 2", on pages 24 to 36).

8.3 The respondent submitted that according to document D13 the interaction required to obtain additional content and the additional content itself were presented on a second screen device. This was done to avoid annoying other viewers watching the main media asset presented on the first screen device (see D13, page 78, left column, first full paragraph: "*In order to avoid annoying other viewers, the interaction process will not be exhibited on the TV screen, but on secondary device screens, for example mobile phones*").

When combining the teaching of document D13 with a method according to document D9, namely with the one disclosed in paragraph [0055], the person skilled in the art would have transferred the entire user interaction to the second user device. This was in contrast to the subject-matter of claim 1, which specified that the fast-access playback operation was initiated on a first user device receiving a user input.

8.4 The board is not convinced by the respondent's arguments because claim 1 only specifies that a fast-access playback operation is initiated on the first user device but leaves open on which device the user input is performed.

8.5 In view of the above, the board takes the view that the presentation of supplemental content on a second screen device and the fast-access playback operation are features which are not functionally interdependent, i.e. do not mutually influence each other to achieve a technical success over and above the sum of their individual effects. Hence, what has to be established is whether each of these features is separately obvious in the light of the prior art (see Case Law, I.D.9.3.2). Document D13 discloses the further distinguishing feature of presenting the supplemental content on a second screen device in the passages provided by the appellant. Faced with the partial objective technical problem formulated by the appellant, the person skilled in the art would have applied this feature to a system according to document D9, thereby directly arriving at the further distinguishing feature set out under point 8.1 above. Moreover, the person skilled in the art would have arrived at the distinguishing feature set out under

point 3.6 above for the same reasons as those set out for claim 1 of the main request (see point 3. 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.

9. Auxiliary request 11 - admittance (Article 12(4) RPBA)

Auxiliary request 11 was filed by the respondent during the appeal proceedings. Hence, this auxiliary request is an amendment to the respondent's appeal case within the meaning of Article 12(4), first sentence, RPBA. However, the independent claims of auxiliary request 11 merely combine the features of the independent claims of the first and second auxiliary requests maintained in the first-instance opposition proceedings. Hence, the amendments in the independent claims of auxiliary request 11 are not complex. This was not contested by the appellant. Therefore, the board exercises its discretion under Article 12(4) RPBA by admitting auxiliary request 11 into the appeal proceedings.

10. Auxiliary request 11 - inventive step (Article 56 EPC)

The independent claims of auxiliary request 11 merely combine the features of the independent claims of auxiliary requests 1 and 6.

Therefore, the subject-matter of claim 1 of auxiliary request 11 lacks an inventive step within the meaning of Article 56 EPC for the same reasons as those set out under points 3., 5. and 8.

11. Auxiliary requests 7 to 10 and 12 to 31 - admittance (Article 12(4) RPBA)

Claim 1 of auxiliary requests 7 to 10 and 12 to 31 specifies a combination of features including those set out in claim 1 of auxiliary requests 2 to 5.

In view of point 6. above, the board therefore exercises its discretion under Article 12(4) RPBA by not admitting auxiliary requests 7 to 10 and 12 to 31 into the appeal proceedings.

## Order

## For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chair:

K. Boelicke B. Willems

Decision electronically authenticated