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**Datasheet for the decision  
of 23 September 2019**

**Case Number:** T 2075/14 - 3.5.04

**Application Number:** 08843061.6

**Publication Number:** 2210413

**IPC:** H04N5/445

**Language of the proceedings:** EN

**Title of invention:**

Method for selecting an audio and/or video service received

**Applicant:**

InterDigital Madison Patent Holdings

**Headword:**

**Relevant legal provisions:**

EPC Art. 56, 123(2)

**Keyword:**

Inventive step - second and third auxiliary request (no)  
Amendments - added subject-matter - fourth auxiliary request  
(yes)

**Decisions cited:**

T 2068/14

**Catchword:**



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Case Number: T 2075/14 - 3.5.04

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.04**  
**of 23 September 2019**

**Appellant:** InterDigital Madison Patent Holdings  
(Applicant) 3 rue du Colonel Moll  
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**Representative:** Huchet, Anne  
InterDigital CE Patent Holdings  
20, rue Rouget de Lisle  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 9 May 2014  
refusing European patent application  
No. 08843061.6 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** C. Kunzelmann  
**Members:** R. Gerdes  
B. Müller

## **Summary of Facts and Submissions**

I. The appeal is directed against the decision to refuse European patent application No. 08 843 061.6, published as international patent application WO 2009/053401 A1.

II. The patent application was refused by the examining division on the grounds that the subject-matter of claim 1 of the main request and the second and third auxiliary requests lacked inventive step (Article 56 EPC) in view of document

D6: US 2006/0259926 A1.

The first auxiliary request was not admitted into the proceedings pursuant to Rules 116(2) and 137(3) EPC, because claim 1 lacked clarity and related to added subject-matter.

III. The applicant appealed against this decision and submitted amended claims of an auxiliary request with the statement of grounds of appeal.

IV. In a communication under Article 15(1) RPBA, which was annexed to the summons to oral proceedings, the board provisionally expressed an unfavourable opinion on the likelihood of success of the appeal. The board also referred to the following document cited in the examination proceedings:

D2: WO 00/52928 A1

V. In a letter dated 17 July 2019, the appellant requested that the oral proceedings be held by video conference to avoid travelling to Germany.

- VI. By a "Communication of the Registry" dated 25 July 2019, the appellant was informed that the oral proceedings could not be held by video conference.
- VII. With a reply to the summons dated 20 August 2019, the appellant submitted a set of amended claims and arguments in support of an inventive step of the subject-matter of these claims.
- VIII. With a letter dated 16 September 2019, the appellant refiled claims of a main request corresponding to those on which the decision under appeal was based and of a first auxiliary request corresponding to those filed with the statement of grounds. It resubmitted the set of claims filed with its letter of 20 August 2019, and clarified that these claims were to be considered as a second auxiliary request.
- IX. Oral proceedings were held before the board on 23 September 2019.

The appellant's initial requests were that the decision under appeal be set aside and a European patent be granted on the basis of the claims of the second auxiliary request filed with the letter dated 16 September 2019, or if this request is not admitted into the appeal proceedings, the claims of the main request or the first auxiliary request filed with the letter dated 16 September 2019.

During the oral proceedings the appellant filed claims of a third and a fourth auxiliary request. The second, third and fourth auxiliary requests were discussed with the appellant.

The appellant's final requests made in writing were "that the Decision to refuse the EP Patent application No 08 843 061.6 under appeal be set aside and that a patent be granted based on the claims of the 2<sup>nd</sup> Auxiliary request [filed] with the letter of September 16, 2019, the 3<sup>rd</sup> auxiliary request or the 4<sup>th</sup> auxiliary request submitted during oral Proceedings of September 23, 2019 before the Board of Appeal."

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

"Method of selection of audio and/or video services, characterised in that said method is implemented by a hybrid receiver (2, 3) receiving said audio and/or video services from distinct networks (12, 15) of different types to which said hybrid receiver is connected via distinct interfaces (24, 25), said method comprising the following steps:

- connecting said distinct interfaces (24, 25) to signalling servers and receiving signalling information from said signalling servers;

- determining (102), based on said received signalling information, at least two of said audio and/or video services representative of a same channel, said at least two of said audio and/or video services representative of a same channel being received via distinct networks (12, 15);

- determining, for each of said determined at least two of said audio and/or video services representative of a same channel, at least one reception quality of service parameter from said received signalling information, said at least one reception quality of service

parameter being at least one of: a presence of an error correction code associated with said at least two of said audio and/or video services, a correction power of an error correction code associated with said at least two of said audio and/or video services, a binary bit-rate of said at least two of said audio and/or video services, global information on characteristics of networks used to transport said at least two of said audio and/or video services;

- determining, for each of said determined at least two of said audio and/or video services representative of a same channel, a reception quality of service mark from said at least one reception quality of service parameter;

- automatically selecting (104) from said determined at least two of said audio and/or video services representative of a same channel, an audio and/or video service having a best reception quality of service mark."

XI. Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request in that the option "global information on characteristics of networks used to transport said at least two of said audio and/or video services;" has been deleted.

XII. Claim 1 of the fourth auxiliary request reads as follows (amendments to claim 1 of the third auxiliary request are underlined):

"Method of selection of audio and/or video services, characterised in that said method is implemented by a hybrid receiver (2, 3) receiving said audio and/or video services from distinct networks (12, 15) of

different types to which said hybrid receiver is connected via distinct interfaces (24, 25), said method comprising the following steps:

- connecting said distinct interfaces (24, 25) to signalling servers and receiving signalling information from said signalling servers;

- determining (102), based on said received signalling information, at least two of said audio and/or video services representative of a same channel, said at least two of said audio and/or video services representative of a same channel being received via distinct networks (12, 15);

- determining, for each of said determined at least two of said audio and/or video services representative of a same channel, at least one reception quality of service parameter from said received signalling information, said at least one reception quality of service parameter being only at least one of: a presence of an error correction code associated with said at least two of said audio and/or video services, a correction power of an error correction code associated with said at least two of said audio and/or video services, a binary bit-rate of said at least two of said audio and/or video services,

- determining, for each of said determined at least two of said audio and/or video services representative of a same channel, a reception quality of service mark from said at least one reception quality of service parameter;

- automatically selecting (104) from said determined at least two of said audio and/or video services



representative of a same channel, an audio and/or video service having a best reception quality of service mark,

- connecting to an audio/video server (13, 16) for receiving [the] automatically selected service."

XIII. In the decision under appeal, see Reasons, point 7.2, the examining division held that D6 did not disclose the use of signalling information received via distinct interfaces to determine corresponding A/V (audio/video) services (distinguishing feature (a)). Nor did it disclose the determination of a reception quality of service parameter for each of the corresponding A/V services from the received signalling information (distinguishing feature (b)). Moreover, it can be inferred from points 9 and 10 of the Reasons that the examining division found D6 to not disclose the options given for the reception quality of service parameter in claim 1, i.e. the service parameter being at least one of a presence of an error correction code associated with said at least two of said audio and/or video services, the correction power of an error correction code associated with said at least two of said audio and/or video services and the binary bit-rate of said at least two of said audio and/or video services (distinguishing feature (c)).

In respect of distinguishing feature (a), the examining division argued that the skilled person would have recognised that the information required for matching programs was available as the program description in the EPGs received from content providers. Concerning distinguishing feature (b), the division noted that the receiver of D6 ranked content items according to technical criteria such as colour resolution, media

encoding format or HD/SD format. It would have been obvious to receive this information from the service provider. The options for the quality of service parameters (distinguishing feature (c)) would have been obvious to the skilled person (see decision under appeal, Reasons, points 7.3 and 10).

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

D6 did not disclose automatically selecting an AV-service based on a reception quality of service. Instead, D6 taught that, in order to distinguish between multiple instances of the same content item, the suitability of the item to be displayed on a particular output device, i.e. the compatibility of the display device, was determined. In addition to the features identified by the examining division, D6 did not disclose the steps of determining a reception quality of service and a reception quality of service mark, or of automatically selecting a service having a best reception quality of service mark.

Parameters such as the media encoding format which were disclosed in D6 (see paragraph [0048] and claim 16) corresponded to secondary parameters of the invention (see present application, page 4, lines 1 to 10). They were distinguished from the first group of quality of service parameters (see page 3, lines 1 to 12) to which claim 1 was limited.

The objective technical problem starting from D6 was how to choose the best quality AV service if the same service was received from multiple different sources.

D6 taught away from the invention by stating that automatic selection from the same content items should be based on the level of compatibility between the various content versions and the display device. The use of this criterion could result in the selection of different content from that when reception quality of service was applied (see statement of grounds, pages 4 and 5).

It was not contested that signalling of parameters was known per se for networks such as DTT and ADSL. However, neither D6 nor D2 disclosed determining a reception quality of service in the sense of the present application, which was exemplified by the first group of parameters described on page 3, lines 1 to 12 of the application. These parameters were obtained from the received signalling information and could therefore be obtained before decoding the AV-content. Even if D6 was combined with D2, the skilled person would only have arrived at a method comparing received signal quality. They would not have determined reception quality of service parameters from the received signalling information.

In respect of the amendment of claim 1 of the fourth auxiliary request, the appellant argued that the wording "... said at least one reception quality of service parameter being only at least one of ..." implied that any of the subsequently listed parameters or any combination of these parameters could be used as reception quality of service parameters. Combinations of these parameters with other parameters (such as the secondary parameters) were excluded by the wording. The amendment was based on page 18, lines 28 to 35 of the application.

## **Reasons for the Decision**

1. The appeal is admissible.

### *Request to hold oral proceedings by video conference*

2. The "Updated notice from the European Patent Office dated 15 November 2018 concerning interviews and oral proceedings to be held as a video-conference" (published in the Office Journal of the EPO, 2018, A96) states that oral proceedings before an examining division may be held as a video-conference.

At present, there are no corresponding provisions for oral proceedings before the boards of appeal. In particular, the current version of the Rules of Procedure before the Boards of Appeal does not include a corresponding provision.

Whereas oral proceedings before the examining division are not public, oral proceedings before the board of appeal are public (see Articles 116(3) and 116(4) EPC). At present, there is no framework which would reconcile holding oral proceedings by video-conference with the requirement that the oral proceedings should be public (see also Case Law of the Boards of Appeal of the European Patent Office, 9th edition 2019, III.C.7.3).

Furthermore, the applicant has not provided any reason why the board should, exceptionally, organise the oral proceedings by video-conference (see T 2068/14, Reasons 1.2).

As a consequence, the appellant's request was refused.

*The invention*

3. A hybrid decoder is capable of receiving audio and/or video (AV) services via distinct networks such as Asymmetric Data Subscriber Line (ADSL), digital terrestrial television (DTT), or a satellite or cable TV network. The application relates to a method of selecting AV services with such a hybrid decoder. If the "same" service is offered via different networks, the service having a best "reception quality of service mark" is automatically selected. The best reception quality of service mark is determined from "reception quality of service parameters" that are extracted from signalling information. The signalling information is received from signalling servers which are distinct from the audio/video servers (see page 1, line 8 to page 2, line 33 and Figure 1).

The application distinguishes between groups of parameters which may be used as reception quality of service parameters. Parameters of a first group can be obtained independently ("outside") of the decoding of the corresponding AV service. Examples of such parameters are parameters obtained from signalling information such as the presence of an error correction code, its correction power or a bit-rate of the AV service. Other "secondary" parameters which may be used in the automatic selection include the coding type of a service (for example H.264 or MPEG2), a compression rate of a channel transported by the service or the geographic location of the source server. By employing parameters available from signalling servers, the invention enables "easy to use information representative of the quality of the service" to be associated with each service available on the networks

(see page 2, line 34 to page 3, line 12 and page 4, lines 1 to 25).

*Second auxiliary request, inventive step, Article 56 EPC*

4. It is common ground that D6 may be considered the closest prior art for the subject-matter of claim 1.

4.1 D6 discloses a method implemented on a computer which is coupled to different content source providers such as the Internet, a cable service or a satellite service. The computer monitors content data availabilities from the content source providers and organises the program availabilities into customised program schedules that are displayed on a monitor or TV screen (see paragraphs [0054] to [0057] and figure 5).

Due to the possible presence of multiple content source providers, multiple instances of the same content item may be available at the same time from different sources. According to the method of D6, multiple instances of the same content are ranked, with only the highest-ranked content item being displayed. The ranking may employ weighting of technical criteria such as pixel or colour resolution, the media encoding format and the aspect ratio (see paragraphs [0011], [0018], [0046] to [0052] and claim 16).

4.2 The board essentially agrees with the reasoning of the examining division (see point XIII above) that D6 does not disclose the following features of claim 1:

(a) the use of signalling servers and signalling information received via distinct interfaces to determine corresponding A/V (audio/video) services,

- (b) the determination of a reception quality of service parameter for each of the corresponding A/V services from the received signalling information, and
- (c) the reception quality of service parameter being at least one of a presence of an error correction code associated with the A/V services, a correction power of an error correction code associated with the A/V services, a binary bit-rate of the A/V services and global information on characteristics of networks used to transport the A/V services.

4.3 The appellant argued that D6 did not disclose automatically selecting an AV-service based on a reception quality of service. Instead, D6 taught that in order to distinguish between multiple instances of the same content item, the suitability of the item to be displayed on a particular output device, i.e. the display device compatibility, was determined. In addition to the features identified by the examining division, D6 did not disclose the steps of determining a reception quality of service and a reception quality of service mark, or of automatically selecting a service having a best reception quality of service mark (see point XIV).

4.4 As indicated above, the board agrees that the determination of the "reception quality of service parameter" specified in claim 1 differs from that in D6 (see distinguishing features (b) and (c)). However, the term itself is not a fixed technical term in the field that excludes per se the possibility of considering the criteria for ranking multiple instances of the same content in D6 as "reception quality of service parameters". As regards the determination of a

"reception quality of service mark", the board is of the opinion that paragraph [0051] of D6 discloses such determination by weighting different reception quality of service parameters in a manner analogous to the present application (see, for example, page 11, line 25 to page 13, line 15). Thus, the board regards the difference between claim 1 and D6 to be correctly represented by features (a) to (c).

- 4.5 The board agrees with the appellant that the objective technical problem may be formulated as how to choose the best quality AV-service if the same service is received from multiple different sources.
- 4.6 The appellant did not contest that signalling of transmission parameters and A/V content was known for networks such as DTT and ADSL. Given the fact that this information is transmitted to user equipment, the board is convinced that the skilled person would have readily retrieved the required information for matching A/V services representative of a same channel from that signalling information (distinguishing feature (a)). For the same reason, the board considers the use of signalling information for the determination of reception quality of service parameters as obvious (distinguishing feature (b)).
- 4.7 The specific choice of the reception quality of service parameters specified in feature (c) may be taken to imply that in the case of the present application the "quality of service at reception", i.e. the quality of the transmitted and received signal (see page 2, lines 31 and 32) is optimised. This aim differs from that of D6, which refers to the technical criterion of "suitability of a particular version of content to be displayed on an output device", see D6,



paragraph [0048]. The board agrees with the appellant that the use of this criterion may result in content being selected which is different from that in D6 (see point XIV above). Nevertheless, the board considers that the use of the alternative criterion of best quality at reception is part of common general knowledge. Optimising quality at reception is ubiquitous in audio and video transmission, as exemplified by D2, see page 2, lines 19 to 21 and claims 6, 10, 11 and 15. It is also common knowledge that the quality of a transmitted signal is dependent *inter alia* on parameters such as the presence of an error correction code, its correction power and the bit-rate of the transmitted signal.

Thus, the board is of the opinion that the skilled person would have considered optimising the "quality of service at reception" and that it would have considered using the parameters of feature (c) for that purpose.

4.8 The appellant argued that even if D6 was combined with D2 the skilled person would only have arrived at a method for comparing received signal quality, i.e. the skilled person would only have employed parameters that were available during or after decoding of a service, see application, page 3, lines 13 to 18.

4.9 The board is not convinced by that argument. Similarly to the present application (see page 4, lines 1 to 10), D6 refers to parameters such as the media encoding format (see paragraph [0048] and claim 16), which are usually available before decoding of the service. Consequently, the board holds that the skilled person would also have considered deriving received signal quality from parameters such as the presence of an error correction code.

- 4.10 As a result, the subject-matter of claim 1 is obvious to a person skilled in the art in view of D6 and thus lacks inventive step (Article 56 EPC).

*Third auxiliary request, inventive step, Article 56 EPC*

5. Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request in that the parameter "global information on characteristics of networks used to transport said at least two of said audio and/or video services" has been deleted.

- 5.1 The reasoning above (see section 4) with respect to claim 1 of the second auxiliary request did not rely on this optional feature, and therefore likewise applies to claim 1 of the third auxiliary request.

- 5.2 As a result, the board finds that the subject-matter of claim 1 of the third auxiliary request lacks inventive step (Article 56 EPC).

*Fourth auxiliary request, added subject-matter, Article 123(2) EPC*

6. Claim 1 of the fourth auxiliary request has been amended *inter alia* to specify that the at least one reception quality of service parameter is "only" based on "at least one of" the parameters of "a presence of an error correction code associated with said at least two of said audio and/or video services, a correction power of an error correction code associated with said at least two of said audio and/or video services, a binary bit-rate of said at least two of said audio and/or video services".

6.1 The appellant argued that the wording "only at least one of" implied that any of the subsequently listed parameters or any combination of these parameters could be used as reception quality of service parameters. Combinations of these parameters with other parameters (such as the secondary parameters referred to on page 4, lines 1 to 10 of the application) were excluded by the wording. The board accepts this interpretation of the wording of claim 1.

6.2 The appellant indicated that the amendment was based on page 18, lines 28 to 35 of the application. The passage reads as follows:

"According to another variant, the QoS analysis performed by the functions 61 and 62 comprises the determination of a mark representative of the QoS by synthesis of QoS parameters that can be obtained outside of the decoding of services, such as the presence of a[n] error correction code associated with the services, a corrector power of such an error correction code, a service binary bit-rate, a variation of the binary bit-rate of services and global information on the characteristics of the networks used to transport these services."

6.3 The board is not convinced that this passage is to be understood to mean that combinations of the cited parameters with other parameters (such as the secondary parameters) are excluded. As is clearly indicated by the wording "such as" in the quoted passage, the subsequent parameters should only be regarded as examples of QoS parameters that can be obtained outside of the decoding of services. In addition, the parameter relating to the "global information on the characteristics of the networks used to transport these

services" is part of the list of parameters in the quoted passage but not mentioned in claim 1. Thus, the restriction to the list of parameters in claim 1 (presence of an error correction code, correction power of an error correction code and binary bit-rate) is not directly and unambiguously derivable from the quoted passage. The appellant did not cite any other passage in support of the feature, nor is the board aware of any pertinent passage.

- 6.4 Consequently, the reference to "only at least one of" the given parameters discloses a specific set of parameters which was not directly and unambiguously derivable from the application as filed. It follows that the amendment infringes Article 123(2) EPC.

*Conclusion*

- 6.5 As a result of the above, none of the appellant's requests is allowable.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:



K. Boelicke

C. Kunzelmann

Decision electronically authenticated