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**Datasheet for the decision  
of 14 November 2019**

**Case Number:** T 0585/14 - 3.5.04

**Application Number:** 02702082.5

**Publication Number:** 1362478

**IPC:** H04N7/10

**Language of the proceedings:** EN

**Title of invention:**

COMMUNICATION SYSTEM WITH SECONDARY CHANNEL REBROADCASTING  
WITHIN A LOCAL AREA NETWORK

**Applicant:**

The DIRECTV Group, Inc.

**Headword:**

**Relevant legal provisions:**

EPC 1973 Art. 56

**Keyword:**

Inventive step - (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
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Case Number: T 0585/14 - 3.5.04

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.04**  
**of 14 November 2019**

**Appellant:** The DIRECTV Group, Inc.  
(Applicant) 2230 E. Imperial Highway  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted on 30 September  
2013 refusing European patent application  
No. 02702082.5 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman** C. Kunzelmann  
**Members:** M. Paci  
B. Müller

## **Summary of Facts and Submissions**

- I. The appeal is against the decision of the examining division refusing European patent application No. 02 702 082.5, published as international patent application WO 02/065772 A2.
- II. The documents cited in the decision under appeal were the following:
- D1: WO 99/34599 A1  
D3: WO 00/76217 A1  
D4: DE 198 46 452 A1
- III. The decision under appeal was based on the grounds that the subject-matter of claims 1 and 4 according to the main request did not involve an inventive step (Article 56 EPC) in view of prior-art documents D3 and D4, and that the subject-matter of claims 1 and 2 according to the first to third auxiliary requests and of claim 1 according to the fourth and fifth auxiliary requests did not involve an inventive step (Article 56 EPC) in view of prior-art document D3 in combination with prior-art documents D4 and D1.
- IV. With the statement of grounds of appeal, the appellant re-filed the sets of claims according to the main and first to fifth auxiliary requests underlying the decision under appeal.
- V. The board issued a summons to oral proceedings together with a communication under Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA, OJ EPO 2007, 536), in which it gave the following preliminary opinion:

- claim 4 according to the main request did not meet the requirement of Article 123(2) EPC;
- claims 1 and 4 according to the main request and claim 2 according to the first and second auxiliary requests did not meet the requirement of clarity of Article 84 EPC 1973; and
- the subject-matter of all the claims according to the main request and the first to fifth auxiliary requests did not involve an inventive step (Article 56 EPC 1973) in view of prior-art document D3 and common general knowledge.

VI. By letter dated 11 October 2019, the appellant informed the board that it would not be attending the oral proceedings. It did not comment on the objections raised by the board.

VII. The board held oral proceedings on 14 November 2019. As announced, the appellant did not attend.

At the oral proceedings, the chairman noted that the appellant had requested that the decision under appeal be set aside and that a European patent be granted on the basis of the claims of the main request or one of the first to fifth auxiliary requests in descending order, all filed with the statement of grounds of appeal.

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

VIII. Claim 1 according to the appellant's **main request** reads as follows:

"A system of distributing electronic content comprising:

a network operations center (12; 214) forming a composite broadcast signal having digital electronic content therein;

a content delivery system (14; 210) receiving said composite broadcast signal from said network operations center and broadcasting said composite broadcast signal;

a base station (16; 180; 190; 220) receiving said composite broadcast signal and forming a wireless local area network (60; 228), said base station (16; 180; 190; 220) rebroadcasting the digital electronic content of said composite broadcast signal as a rebroadcast signal using said wireless local area network (60; 228); and characterized by

a plurality of user appliances (18; 232) positioned within said wireless local area network, said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal; and

wherein said wireless local area network (60; 228) is formed between said base station (16; 220) and said plurality of user appliances (18; 232) communicating the rebroadcast signal to the user appliances (18; 232) from the base station (60; 180; 190; 220)."

IX. Claim 1 according to the appellant's **first auxiliary request** reads as follows:

"A system of distributing electronic content comprising:

a network operations center (12) forming a composite broadcast signal having a broadcast television signal and digital electronic content therein;

a content delivery system (14) receiving said composite broadcast signal from said network operations

center and broadcasting said composite broadcast signal; and characterized by

a base station (16; 180; 190) receiving said composite broadcast signal and forming a wireless local area network (60), said base station (16; 180; 190) rebroadcasting the broadcast television signal and the digital electronic content of said composite broadcast signal as a rebroadcast signal using said wireless local area network (60);

a plurality of user appliances (18) positioned within said wireless local area network, wherein said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal; and

said wireless local area network (60) formed between said base station (16; 220) and said plurality of user appliances (18) communicating the rebroadcast signal to the user appliances (18; 232) from the base station (60; 180; 190)."

X. Claim 1 according to the appellant's **second auxiliary request** reads as follows:

"A system of distributing digital electronic content, characterized by:

a network operations center (12) forming a composite broadcast signal having an allocated bandwidth (170), wherein the composite broadcast signal comprises a digital broadcast television signal having a broadcast channel bandwidth (172), wherein the broadcast channel bandwidth (172) is less than the allocated bandwidth (170) such that an excess bandwidth (174) remains, and wherein the composite broadcast signal further comprises the digital electronic content in the excess bandwidth (174);

a content delivery system (14) receiving said composite broadcast signal from said network operations center and broadcasting said composite broadcast signal;

a base station (16; 190) receiving said composite broadcast signal and forming a wireless local area network (60), said base station (16; 190) rebroadcasting the broadcast television signal and the digital electronic content of said composite broadcast signal as a rebroadcast signal using said wireless local network (60);

a plurality of user appliances (18) positioned within said wireless local area network, wherein said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal; and

said wireless local area network (60) formed between said base station (16; 190) and said plurality of user appliances (18) communicating the rebroadcast signal to the user appliances (18) from the base station (16; 190)."

XI. Claim 1 according to the appellant's **third auxiliary request** reads as follows:

"A system of distributing digital electronic content, characterized by:

a network operations center (12) forming a composite broadcast signal having an allocated bandwidth (170), wherein the composite broadcast signal comprises a digital broadcast television signal having a broadcast channel bandwidth (172), wherein the broadcast channel bandwidth (172) is less than the allocated bandwidth (170) such that an excess bandwidth (174) remains, and wherein the composite broadcast



signal further comprises the digital electronic content in the excess bandwidth (174);

a content delivery system (14) receiving said composite broadcast signal from said network operations center and broadcasting said composite broadcast signal;

a base station (16; 190) receiving said composite broadcast signal and forming a wireless local area network (60), said base station (16; 190) rebroadcasting the broadcast television signal and the digital electronic content of said composite broadcast signal as a rebroadcast signal using said wireless local network (60);

a plurality of user appliances (18) positioned within said wireless local area network, wherein said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal, and wherein the plurality of user appliances (18) disregards the composite broadcast signal except for the digital electronic content; and

said wireless local area network (60) formed between said base station (16; 190) and said plurality of user appliances (18) communicating the rebroadcast signal to the user appliances (18) from the base station (16; 190)."

XII. Claim 1 according to the appellant's **fourth auxiliary request** reads as follows:

"A system of distributing digital electronic content, characterized by:

a network operations center (12) forming a composite broadcast signal having an allocated bandwidth (170), wherein the composite broadcast signal comprises a digital broadcast television signal having

a broadcast channel bandwidth (172), wherein the broadcast channel bandwidth (172) is less than the allocated bandwidth (170) such that an excess bandwidth (174) remains, and wherein the composite broadcast signal further comprises the digital electronic content in the excess bandwidth (174);

a content delivery system (14) receiving said composite broadcast signal from said network operations center and broadcasting said composite broadcast signal;

a base station (16; 190) receiving said composite broadcast signal and forming a wireless local area network (60), said base station (16; 190) rebroadcasting the broadcast television signal and the digital electronic content of said composite broadcast signal as a rebroadcast signal using said wireless local network (60);

a plurality of user appliances (18) positioned within said wireless local area network, the plurality of user appliances (18) being coupled to said base station (16; 190); wherein said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal; and

said wireless local area network (60) formed between said base station (16; 190) and said plurality of user appliances (18) communicating the rebroadcast signal to the user appliances (18) from the base station (16; 190)."

XIII. Claim 1 according to the appellant's **fifth auxiliary request** reads as follows:

"A system of distributing digital electronic content, characterized by:

a network operations center (12) forming a composite broadcast signal having an allocated bandwidth (170), wherein the composite broadcast signal comprises a digital broadcast television signal having a broadcast channel bandwidth (172), wherein the broadcast channel bandwidth (172) is less than the allocated bandwidth (170) such that an excess bandwidth (174) remains, and wherein the composite broadcast signal further comprises the digital electronic content in the excess bandwidth (174);

a content delivery system (14) receiving said composite broadcast signal from said network operations center and broadcasting said composite broadcast signal;

a base station (16; 190) receiving said composite broadcast signal and forming a wireless local area network (60), said base station (16; 190) rebroadcasting the broadcast television signal and the digital electronic content of said composite broadcast signal as a rebroadcast signal using said wireless local network (60);

a plurality of user appliances (18) positioned within said wireless local area network, the plurality of user appliances (18) being coupled to said base station (16; 190); wherein said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal, and wherein the plurality of user appliances (18) disregards the composite broadcast signal except for the digital electronic content; and

said wireless local area network (60) formed between said base station (16; 190) and said plurality of user appliances (18) communicating the rebroadcast signal to the user appliances (18) from the base station (16; 190)."

## **Reasons for the Decision**

1. The appeal is admissible.

*Main request - Article 56 EPC 1973*

2. Closest prior art

The examining division considered document D3 to be the closest prior art. The appellant has not disputed this finding. The board concurs that D3 represents the closest prior art.

3. Disclosure of D3

D3 discloses a data distribution system, in particular an interactive television broadcast network (see page 1, lines 5 and 6, and figures 1 to 3), comprising a broadcast station (26 in figure 2; 32 in figure 3 and the whole of figure 5), one or more receiving stations (12 in figure 1; 22 in figure 2; 53 in figure 3 and the whole of figure 6) and a plurality of "home digital assistants" (hereinafter "HDA") (10 in figure 1; 20 in figure 2 and the whole of figure 4).

The broadcast station sends a broadcast signal to the one or more receiving stations, e.g. via satellite (see figure 3 and page 2, lines 23 to 33). The broadcast signal may include three components which are separated in the receiving station: audio and video data targeted to a television (51 in figure 3), receiver data targeted to the receiving station(s) and home digital assistant data targeted to the HDA(s) (see page 3, lines 3 to 12). The broadcast signal may be analogue or digital and, where it is analogue, the receiver data

and home digital assistant data may be transmitted in the vertical blanking interval (VBI) of the television signal (see page 4, lines 16 to 28, and page 13, lines 25 to 29). The receiving station may comprise a set-top-box (50) and a television (51) (see from page 4, line 29 to page 5, line 5).

The receiving station creates a wireless (RF) local area network to which HDAs can wirelessly connect so that data, programming and other information may be transmitted between the receiving station and the HDA(s) (see page 3, lines 13 to 22, and page 5, lines 14 to 17). The HDA(s) is/are equipped with a speaker (86) and a display (87) and may wirelessly receive audio data, visual data and/or other data from the receiving station (see page 3, lines 23 to 29, page 5, lines 33 to 36, and page 6, lines 16 to 27). In particular, the HDA(s) may receive "streaming audio and/or video" to be played on its speaker and display (see page 6, lines 22 to 27). The HDA may also filter the data received from the receiving station and disregard the data it is not interested in (see from page 10, line 30, to page 11, line 1, in particular the sentence bridging pages 10 and 11).

4. Distinguishing feature(s)

Under point 1.5 of the reasons for the decision the examining division explained why all the features of the system of claim 1 were known from D3, except for the distinguishing feature that

"said plurality of user appliances has conditional access software therein, said conditional access software allowing the user appliances access to said rebroadcast signal".

The appellant did not dispute that the above feature was the sole distinguishing feature (see pages 3 and 4 of the statement of grounds of appeal).

The board shares the examining division's analysis and conclusion.

5. Technical effect and objective technical problem

5.1 The examining division held that the technical effect of the distinguishing feature was that "the authorised access is implemented in the plurality of user appliances" and the objective technical problem was "how to provide a home digital assistant, as from D3 with a means to allow for authorized viewing of the rebroadcast digital content" (see points 1.5.3 and 1.5.4 of the reasons).

5.2 The appellant submitted that the objective technical problem could be defined as "restricting access to the rebroadcasted data only to authorized users" (see page 4, penultimate paragraph, of the statement of grounds of appeal).

5.3 The board considers the above two formulations of the objective technical problem to be essentially equivalent and therefore accepts the appellant's formulation.

6. Obviousness

6.1 Under point 1.5.2 of the reasons the examining division noted that D3 mentioned the use of conditional access on page 7, lines 12 and 13, for the communication between the broadcast station (corresponding to the

"network operations center" in claim 1) and the receiving station (corresponding to the "base station" in claim 1), but not for the content rebroadcast from the receiving station to the HDA(s) (corresponding to the "user appliances" in claim 1).

6.2 The appellant concurred with this finding (see page 4, second paragraph, last sentence, of the statement of grounds of appeal).

6.3 The examining division pointed out that prior-art document D4 disclosed a similar television system with conditional access to television programmes in which a control unit (Steuergerät 2 in figures 1 and 2), such as a set-top-box (see column 3, lines 58 to 61), could communicate wirelessly with mobile telephones (3 in figures 1 and 2) and user information on the mobile telephones was used for allowing or denying access to data, such as a television programme (see column 4, lines 25 to 67).

Hence D4 disclosed, via the use of the access software in the user appliance, a means for allowing only authorised viewing of a rebroadcast signal. By applying this teaching to the system of D3, the skilled person would have arrived at the system of claim 1 without an inventive step.

6.4 The appellant essentially argued that document D4 did not provide conditional access to the data rebroadcast from the control unit (2) to the mobile telephones (3). Indeed, the conditional access in D4 only concerned the television signal sent from the control unit (2) to the television (1), not the rebroadcast signal sent from the control unit (2) to the mobile telephones (3).

Hence, D4 did not suggest the distinguishing feature of claim 1.

- 6.5 The board is of the view that, starting from D3, the skilled person would have arrived at the system of claim 1 without an inventive step for the following reasons:

In the past, conditional access to encrypted data was a well-known technique which was commonly used for preventing unauthorised access to data such as television programmes or channels.

In D3, the HDA(s) wirelessly receive data which may include audio and/or video streamed from the broadcast station via the receiving station and played on the HDA(s) (see page 6, lines 16 to 27). In the board's view, it would therefore have been obvious to the skilled person that the audio and/or video streamed to the HDA(s) could advantageously be protected from access by unauthorised HDA(s)/user(s) by providing conditional access software on the HDA(s).

- 6.6 Hence, the system of claim 1 does not involve an inventive step in view of prior-art document D3 and common general knowledge on conditional access.

7. Conclusion on the main request

Since the subject-matter of claim 1 does not involve an inventive step, the appellant's main request is not allowable.



*First auxiliary request - Article 56 EPC 1973*

8. Claim 1 according to the first auxiliary request differs from claim 1 according to the main request essentially in that it specifies that the composite broadcast signal comprises a broadcast television signal in addition to the digital electronic content and in that the broadcast television signal is rebroadcast by the base station to the user appliances.
9. The composite signal transmitted from the broadcast station in D3 also comprises a broadcast television signal (see page 2, lines 25 to 28). Moreover, since the receiving station of D3 may stream audio and/or video data to the HDA(s) (see page 6, lines 22 to 27), it would be obvious to stream the broadcast television signal received by the receiving station from the broadcast station. Hence, the system of claim 1 according to the first auxiliary request also lacks an inventive step, essentially for the same reasons as the system of claim 1 according to the main request.
10. Hence the appellant's first auxiliary request is not allowable.

*Second auxiliary request - Article 56 EPC 1973*

11. Claim 1 of the second auxiliary request differs from claim 1 of the first auxiliary request essentially in that the electronic content is explicitly digital and is transmitted in the excess bandwidth of a digital broadcast channel.
12. D3 explicitly discloses that the broadcast channel for the transmission from the broadcast station to the receiving station may be digital ("digital, switched

packet transmission" and "HDTV") or analogue ("vertical blanking interval (VBI) transmission") (see page 4, lines 16 to 21, and the sentence bridging pages 4 and 5).

With digital transmission, the data other than the digital television signal would thus have to be transmitted in the excess bandwidth of the broadcast channel.

Hence, the system of claim 1 of the second auxiliary request does not involve an inventive step.

13. Accordingly, the appellant's second auxiliary request is not allowable.

*Third auxiliary request - Article 56 EPC 1973*

14. The system of claim 1 of the third auxiliary request differs from that of claim 1 of the second auxiliary request by the additional feature that "the plurality of user appliances (18) disregard the composite broadcast signal except for the digital electronic content".
15. The board regards this additional feature as obvious in view of the disclosure in D3 that the HDA may filter the data received from the receiving station and only keep the data it is interested in (see from page 10, line 30, to page 11, line 1, in particular the sentence bridging pages 10 and 11). The HDA(s) which are interested only in the additional data but not in the television signal would disregard the television signal.

Hence, the system of claim 1 of the third auxiliary request does not involve an inventive step.

16. Accordingly, the appellant's third auxiliary request is not allowable.

*Fourth auxiliary request - Article 56 EPC 1973*

17. The system of claim 1 of the fourth auxiliary request differs from that of claim 1 of the second auxiliary request by the following additional feature: "the plurality of user appliances (18) being coupled to said base station (16; 190)".

This feature adds nothing inventive because it is known from D3 in which the HDA(s) (the user appliances) are coupled wirelessly to the receiving station (the base station).

18. Hence the appellant's fourth auxiliary request is not allowable.

*Fifth auxiliary request - Article 56 EPC 1973*

19. The system of claim 1 of the fifth auxiliary request differs from that of claim 1 of the second auxiliary request by the additional features of claim 1 of the third and fourth auxiliary requests.

These additional features lead to a combination of features which, individually, are obvious to a person skilled in the art, for the reasons given above. The board is unable to detect any synergistic effect caused by their being combined. Therefore, the subject-matter of claim 1 of the fifth auxiliary request does not involve an inventive step.

20. Accordingly, the appellant's fifth auxiliary request is not allowable.

*Conclusion*

21. Since none of the appellant's requests is allowable, the appeal must be dismissed.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:



K. Boelicke

C. Kunzelmann

Decision electronically authenticated