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Datasheet for the decision of 27 March 2018

Case Number: T 0202/12 - 3.5.04

Application Number: 96941926.6

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Title of invention:
TELEVISION BROADCAST SYSTEM AND METHOD

Applicant:
Aras, Mehmet, Rifat

Headword:

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EPC 1973 Art. 56

Keyword:
Inventive step - main and auxiliary requests (no)

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Catchword:

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Case Number: T 0202/12 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 27 March 2018

Appellant: (Applicant)	Aras, Mehmet, Rifat Bestekar Sokak 74/10, Kavaklidere 06680 Ankara (TR)
Representative:	Louis Pöhlau Lohrentz Patentanwälte Postfach 30 55 90014 Nürnberg (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 9 September 2011 refusing European patent application No. 96941926.6 pursuant to Article 97(2) EPC**

Composition of the Board:

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

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division dated 9 September 2011 refusing European patent application No. 96941926.6, which was published as WO 98/30026 A1.

II. The documents cited in the decision under appeal included the following:

D1: WO 96/08923 A1

D3: US 5 495 283 A.

III. The application was refused on the grounds that the subject-matter of independent claims 1 and 17 of the then main request and first to fourth auxiliary requests lacked inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by document D3 (Article 56 EPC 1973).

IV. The applicant filed notice of appeal, requesting that the examining division's decision be set aside. With his statement of grounds of appeal he maintained the main and first to fourth auxiliary requests underlying the decision under appeal and filed claims according to fifth to eighth auxiliary requests. He requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request, or alternatively of one of the first to eighth auxiliary requests. He provided arguments as to why the subject-matter of the independent claims of all requests was new and involved an inventive step.

No request for oral proceedings was filed in the appeal proceedings.

V. The board issued a summons to oral proceedings. In a communication under Article 15(1) RPBA (Rules of Procedure of the Boards of Appeal, OJ EPO 2007, 536), annexed to the summons, the board gave its provisional opinion that the subject-matter of claim 1 of all requests lacked inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

VI. With a reply dated 6 December 2017 the board was informed that neither the appellant nor his representative would be attending the oral proceedings. In a further reply dated 13 December 2017 the following was stated: "*Our request for oral proceedings is herewith withdrawn and a written decision is requested.*" The appellant did not file any amendments or comments in response to the board's communication.

VII. The board notified the appellant that the oral proceedings scheduled for 26 April 2018 were cancelled.

VIII. Claim 1 of the main request and first auxiliary request read as follows (additions to the former in the latter are in *italics*):

"A TV broadcast method for a system to be operated from a TV continuity studio within the control of a broadcast flow unit, comprising the steps:
(a) generating alphanumeric characters and/or image data separately for each of plural remote sites at a central site and transmitting said alphanumeric

characters and/or image data therefrom to said plural remote sites via a modem;
(b) generating and transmitting command codes to remotely control each of said remote sites from the said central site;
characterized by
(c) detecting whether said alphanumeric characters and/or image data have been received correctly at the said remote sites via said modem;
(d) at each remote site, overlaying said alphanumeric characters and/or image data onto the continuing general television signal *by superimposing said alphanumeric characters and/or image data on the video from general broadcast*;
(e) detecting whether the said alphanumeric characters and/or image data have been broadcast via transmission of remote station operating information sent back to the central site."

IX. Claim 1 of the second auxiliary request corresponds to claim 1 of the main request with feature (d) reading as follows (additions to claim 1 of the main request are in *italics*):

"(d) at each remote site, overlaying said alphanumeric characters and/or image data onto the continuing general television signal *by onserting said alphanumeric characters and/or image data on a video source which video is the general broadcast*".

X. Claim 1 of the third auxiliary request corresponds to claim 1 of the main request with features (d) and (e) reading as follows:

"(d) detecting whether the said alphanumeric characters and/or image data have been broadcast via transmission

of remote station operating information sent back to the central site;
characterized by
(e) at each remote site, overlaying said alphanumeric characters and/or image data onto the continuing general television signal by superimposing said alphanumeric characters and/or image data on the video from general broadcast."

XI. Claim 1 of the fourth auxiliary request corresponds to claim 1 of the third auxiliary request with feature (e) (after the second "characterized by") reading as follows:

"(e) at each remote site, overlaying said alphanumeric characters and/or image data onto the continuing general television signal by onserting said alphanumeric characters and/or image data on a video source which video is the general broadcast;".

XII. Claim 1 of the fifth and sixth auxiliary requests reads as follows (additions to the former in the latter are in *italics*):

"A TV broadcast method for a system to be operated from a TV continuity studio within the control of a broadcast flow unit, comprising the steps:
(a) generating alphanumeric characters and/or image data separately for each of plural remote sites at the TV continuity studio and transmitting *data files comprising* said alphanumeric characters and/or image data *and an identification code* from said TV continuity studio to said plural remote sites via a modem;
(b) detecting whether said alphanumeric characters and/or image data have been received correctly at the said remote sites via said modem;

(c) generating at the TV continuity studio command codes to remotely control each of said remote sites from said TV continuity studio, *said command codes including identification tags for data files and preferably further the order of display of these data files*, and transmitting said command codes from said TV continuity studio to said remote sites together with a general broadcast;
(d) at each remote site, overlaying said alphanumeric characters and/or image data onto the continuing general television signal by superimposing said alphanumeric characters and/or image data on the video from general broadcast;
(e) detecting whether the said alphanumeric characters and/or image data have been broadcast via transmission of remote station operating information sent back to said TV continuity studio."

XIII. Claim 1 of the seventh and eighth auxiliary requests reads as follows (additions to the former in the latter are in *italics*):

"A TV broadcast method for a system to be operated from a TV continuity studio within the control of a broadcast flow unit, comprising the steps:

(a1) generating alphanumeric characters and/or image data separately for each of plural remote sites at the TV continuity studio,
(a2) superimposing said alphanumeric characters and/or image data on an external video and
(a3) viewing the results on a screen at said TV continuity studio, possibly
(a4) making changes,
(a5) storing a final version as the data files comprising said alphanumeric characters and/or image

data and an identification code and transmitting said data files from said TV continuity studio to said plural remote sites via a modem;
(b) detecting whether said alphanumeric characters and/or image data have been received correctly at the said remote sites via said modem;
(c) generating *upon pressing of a single button of a control console or a single key or multiple keys of a keyboard* at the TV continuity studio command codes to remotely control each of said remote sites from said TV continuity studio, said command codes including identification tags for data files and preferably further the order of display of these data files, and transmitting said command codes from said TV continuity studio to said remote sides together with a general broadcast;
(d) at each remote site, overlaying said alphanumeric characters and/or image data onto the continuing general television signal by superimposing said alphanumeric characters and/or image data on the video from general broadcast;
(e) detecting whether the said alphanumeric characters and/or image data have been broadcast via transmission of remote station operating information sent back to said TV continuity studio."

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

(a) D1 was the closest prior art for the assessment of inventive step. It disclosed a TV broadcast method having essentially features (a), (b) and (c) of claim 1 of the then main request (see decision, Reasons, points 1.4.1 to 1.4.3).

(b) The subject-matter of claim 1 of the then main request differed from the disclosure of document D1 in that the former comprised "*a step of detecting whether said alphanumeric characters and/or image data have been broadcast via transmission of remote station operating information sent back to the central site" and "the alphanumeric characters and/or image data [were] overlaid onto the TV signal*" (see decision, Reasons, point 1.4.4).

(c) These features were not functionally interdependent. Two separate technical problems could be formulated: "*a) which remote station operating information should be logged and sent back to the central site; and b) how to* ***only*** *insert text or characters into a video signals*" (emphasis added) (see decision, Reasons, point 1.4.6).

(d) Both problems were solved "*by routine, generally known details which the person skilled in the art would apply to the subject matter of D1 without having made an inventive step as defined in Article 56 EPC*" (see decision, Reasons, points 1.4.7 and 1.4.8). In particular, overlaying a text onto TV signals was well-known at the priority date. This could be seen, for instance, in document D3.

(e) The subject-matter of claim 1 of the first and second auxiliary requests did "*not differ in technical matter of that one of claim 1 [...] of the main request [and] the objections raised in respect of these latter claims, therefore, also apply, mutatis mutandis*" (see decision, Reasons, points 2.5.2 and 3.5.2).

(f) Claim 1 of the third and fourth auxiliary requests "*corresponds in terms of technical matter to the auxiliary request 1 [or 2]*". Thus, the subject-matter of claim 1 of the third and fourth auxiliary requests "*does not involve an inventive step over the disclosure of D1 in the sense of Article 56 EPC*" for the reasons set out in points 2.5 and 3.5 of the impugned decision (see decision, Reasons, points 4.3 and 5.3).

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

(a) D1 disclosed only switching means for inserting a data/media segment or block in a defined slot (see statement of grounds of appeal, page 5, third full paragraph). Document D1 did not address "*the question how to only insert text or characters*" (see statement of grounds of appeal, page 5, penultimate paragraph, and page 6, first paragraph).

(b) The problem of "*how to only insert text or characters*" identified by the examining division comprised "*an aspect of the solution to the problem*" and already involved an invention (see statement of grounds of appeal, page 5, last paragraph).

(c) Document D3 taught that a "*particular alerting message [should be] received by every member of the cable television audience*" (see statement of grounds of appeal, page 7, first paragraph). This was in contrast with the local insertion of material known from D1, i.e. locally inserting specific advertisements. Therefore, combining D1

and D3 was based on hindsight (see statement of grounds of appeal, page 7, third and fifth paragraphs).

(d) Document D1 did not hint at providing a service and/or control station within the central TV station (see statement of grounds of appeal, page 9, third paragraph).

(e) D1 disclosed generating characters to be inserted at a service and/or control station rather than at the central TV station. According to the invention, generating and transmitting the alphanumeric characters and/or image data at the TV continuity studio facilitated the generation of identification codes for the additional material (see statement of grounds of appeal, page 8, penultimate paragraph, and page 10, first full paragraph).

(f) Document D1 did not allow "*controlling, at the TV continuity studio, the result of the generating of alphanumeric characters and/or image data when superimposed to video*" (see statement of grounds of appeal, page 10, third and fourth paragraphs).

(g) D1 disclosed inserting the additional material in predefined slots rather than in reaction to command codes generated "*upon pressing of a single button [...] or single key*" (see statement of grounds of appeal, page 11, first full paragraph).

Reasons for the Decision

1. The appeal is admissible.

2. *Inventive step - main request (Article 56 EPC 1973)*

2.1 D1 is the closest prior art for the assessment of inventive step. The appellant did not contest the analysis of the disclosure of document D1 put forward in points 1.4.1 to 1.4.3 of the decision under appeal. The board agrees with the examining division's appraisal of the disclosure of D1.

2.2 Taking into account the examining division's reasoning referred to in point XIV(c) above and the appellant's comments summarised in point XV(b) above, two separate objective technical problems can be identified:

(a) which remote station operating information should be logged and sent back to the central site; and

(b) how to insert text or characters into a video signal.

2.3 The appellant did not provide any comments on the examining division's analysis in point 1.4.7 of the decision under appeal that the problem mentioned under (a) "*is solved by routine, generally known details which the person skilled in the art would apply to the subject matter of D1*". The board agrees with this analysis. In particular, it agrees that "*the broadcast of the additional material, i.e. the alphanumeric characters and the image data, is the central subject-matter of the TV system of D1 and should therefore be monitored by the central site*".

2.4 The board also agrees with the examining division that when inserting text or characters as suggested by D1, page 3, lines 23 and 24, for a person skilled in the art "*it would be obvious that the additional material should not replace the whole original video signal but be only overlaid onto the television signal*" (see decision under appeal, point 1.4.8).

In addition, document D3 discloses a "*channel message inserter 32 to insert a video message which can, preferably, be, or include, a text, especially a crawl text moving horizontally*" and that "*[s]impler systems suitable for emergency alerting can provide a single line of text moving across an otherwise uninterrupted program screen*" (column 9, lines 25 to 46, and column 10, line 52, to column 11, line 7). Summarising, document D3 reflects the common general knowledge of a person skilled in the art that text messages may be displayed as an overlay on an "uninterrupted program screen" and provides technical details of how to create the overlay.

2.5 The board has not been persuaded by the appellant's argument that D1 and D3 should not be combined because D1 related to locally inserting additional material whereas D3 taught that "*particular alerting messages [should be] received by every member of the cable television audience*" (see point XV(c) above). Rather, the board concurs with the examining division that the person skilled in the art would implement the message overlay known from D3 in the remote headend known from D1 to generate an image with overlaid graphics or text (see decision under appeal, points 1.4.8 and 1.4.9).

2.5.1 In document D1, the term "local" is used to refer to "*remote headend stations 4 for rebroadcasting a*

television signal [... wherein a] headend station 4 may also be coupled to a service and/or control station 6 where additional material to be inserted [...] may be produced" (see page 3, lines 16 to 24).

2.5.2 Similarly, document D3 discloses receiving video signals and converting appropriately addressed digital messages to be overlaid on the program of a particular channel (see column 10, lines 46 to 62). The message is thus provided to all receivers tuned to a particular channel but not to "*every member of the cable television audience*" (see statement of grounds of appeal, page 7, first full paragraph).

2.5.3 Hence, both document D1 and document D3 specify a method in which locally generated content is "inserted" into the program signal of a designated channel and the composite signal is then broadcast to terminals.

2.5.4 Moreover, the disclosure of document D3 is not limited to inserting emergency messages but also includes inserting advertising messages (see document D3, paragraph bridging columns 10 and 11).

2.6 Furthermore, the board has not been convinced that D1 only discloses "switching means 74" for providing text and characters (see point XV(a) above).

2.6.1 Document D1, Figure 5, and the corresponding passage of the description on pages 9 and 10 disclose an embodiment in which audio and video are separately substituted ("*Said audio/video switches are each provided with one video switch and four audio switches, which change simultaneously [...] to the corresponding insertion signals [...] in response to insertion control signals*"). The video signals are separately

switched "*to allow centrally broadcast vertical interval data to pass through unchanged*". Thus, although D1 does not address how to only insert text or characters, it does disclose how to separately insert audio or video components rather than only switching segments in defined slots (see point XV(a) above). Moreover, it stresses the importance of passing the control signals inserted in the vertical blanking interval of the original broadcast signals. Simply substituting frames of the original broadcast signals with text would ignore this teaching of D1. Thus, D1 provides a clear hint to the person skilled in the art to avoid simply substituting the original broadcast signals with text or graphics.

2.6.2 Since the cited passages of document D1 teach separate switches for audio and video signals, the board, contrary to the appellant, is of the opinion that the person skilled in the art would consider providing separate means for treating text to be inserted. Overlaying text on video signals belonged to the common general knowledge of the person skilled in the art at the priority date of the present application (see point 2.4 above). The person skilled in the art would have had no difficulty incorporating adequate (additional) means for overlaying text on video signals in the apparatus known from document D1.

2.7 In view of the above, the board comes to the conclusion that the subject-matter of claim 1 of the main request lacks inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

3. *Inventive step - first to fourth auxiliary requests (Article 56 EPC 1973)*

3.1 In the decision under appeal, the examining division remarked that the subject-matter of claim 1 of the first and second auxiliary requests "*does not differ in technical matter of that of claim 1 [...] of the main request*" and that claim 1 of the third and fourth auxiliary requests corresponded "*in terms of technical matter*" to claim 1 of the first and second auxiliary requests, respectively (see points XIV(e) and (f) above).

3.2 The appellant submitted that "*[s]imilar considerations [as for claims 1 and 17 of the main request] apply to the claims 1 and 17 of auxiliary requests 1, 2, 3 and 4*" (see statement of grounds of appeal, page 8, third full paragraph).

3.3 The board agrees with the examining division and the appellant (see points 3.1 and 3.2 above) that the amendments to the wording of claim 1 of these auxiliary requests do not change the assessment of inventive step given in the context of the main request. Thus, in view of the above, the board comes to the conclusion that, for the reasons set out in section 2 above, the subject-matter of claim 1 of the first to fourth auxiliary requests lacks inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

4. *Inventive step - fifth auxiliary request (Article 56 EPC 1973)*

4.1 In comparison with claim 1 of the first auxiliary request, claim 1 of the fifth auxiliary request further specifies that the characters and command codes are generated at the TV continuity studio, the command codes are transmitted with the broadcast to the remote sites, and the remote station operating information is sent back to the TV continuity studio.

4.2 The board notes that the term "*TV continuity studio*" does not have a well-defined technical meaning. From the explanation given on page 4 of the present application, the board concludes that the "*TV continuity studio*" corresponds to the central TV station known from D1.

4.3 D1, page 4, lines 31 to 33, discloses generating cue signals (command codes for inserting media segments) at the central TV station and inserting them in the television signal transmitted to the remote headend stations. The board agrees with the appellant (see point XV(e) above) that D1 discloses generating characters to be inserted at a service and/or control station rather than at the central TV station.

However, the person skilled in the art would consider co-locating the generation of the additional material to be inserted and the generation of the cue signals. Since the latter is located at the central TV station, the person skilled in the art would consider locating the generation of the additional material at the central TV station.

4.4 According to D1, page 5, lines 5 and 6, logging information is transmitted from the remote headend station to the central TV station.

The board agrees with the examining division that notifying the central TV station whether the additional material has been stored in the remote headend station implies detecting whether said data has been correctly received at the remote headend (see decision, Reasons, point 1.4.2). Hence, D1 discloses detecting whether the additional material has been correctly received.

4.5 In view of the above, the board comes to the conclusion that the subject-matter of claim 1 of the fifth auxiliary request lacks inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

5. *Inventive step - sixth auxiliary request (Article 56 EPC 1973)*

5.1 In comparison with claim 1 of the fifth auxiliary request, claim 1 of the sixth auxiliary request further specifies that the alphanumeric characters are transmitted in a data file with an identification code and that the command codes include identification tags for the data files and preferably a display order for the files.

5.2 Document D1, page 4, lines 12 to 14, discloses that the "*remote headend station of Fig. 1 comprises [...] storage means 24 for storing a local playlist, additional material or media segments to be inserted, log files and status information*". The controlling

commands inserted in the broadcast signal comprise "*firstly, a cue signal transferring information about playlists for different remote control units 22 and secondly, an action signal for triggering the insertion of a predefined media segment*" (sentence bridging pages 5 and 6).

5.3 It would be obvious to a person skilled in the art to use a file as a data structure for transferring and storing additional material to be inserted. The playlist would then identify files and the order for reproducing the data in different files, and the action signal (command code) would identify the file with the data to be displayed.

5.4 In view of the above, the board comes to the conclusion that the subject-matter of claim 1 of the sixth auxiliary request lacks inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

6. *Inventive step - seventh auxiliary request (Article 56 EPC 1973)*

6.1 In comparison with claim 1 of the sixth auxiliary request, claim 1 of the seventh auxiliary request further specifies displaying the superimposed additional data and editing the data at the TV continuity studio.

6.2 Document D1, page 4, lines 29 and 30, discloses that the insertion of additional data is planned and controlled by means of a central control unit of the central TV station. According to page 4, lines 9 to 11,

the central control unit is operated by means of menu software using a keyboard or a customised control panel. The board is of the opinion that a person skilled in the art would enhance the available interface to allow editing of the additional material to be inserted.

6.3 In view of the above, the board comes to the conclusion that the subject-matter of claim 1 of the seventh auxiliary request lacks inventive step over the disclosure of document D1 combined with the common general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

7. *Inventive step - eighth auxiliary request (Article 56 EPC 1973*)

7.1 In comparison with claim 1 of the seventh auxiliary request, claim 1 of the eighth auxiliary request further specifies generating the command codes at the TV continuity studio by pressing a button or keys of a keyboard.

7.2 As set out in point 6.2, D1 discloses controlling the insertion of additional material, i.e. encoding a command code (cue signal) into the broadcast signal, using a keyboard at the central control unit. Thus, contrary to the appellant's assertion (see point XV(g) above), the additional feature of claim 1 of the eighth auxiliary request is known from document D1.

7.3 In view of the above, the board comes to the conclusion that the subject-matter of claim 1 of the eighth auxiliary request lacks inventive step over the disclosure of document D1 combined with the common

general knowledge of a person skilled in the art as exemplified by the disclosure of document D3 (Article 56 EPC 1973).

8. Since none of the appellant's requests is allowable, the appeal is to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

K. Boelicke C. Kunzelmann

Decision electronically authenticated