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Datasheet for the decision of 2 March 2011

Case Number: T 0419/07 - 3.5.04

Application Number: 95113438.6

Publication Number: 0701367

IPC: H04N 5/46

Language of the proceedings: EN

Title of invention:
Program guide interface

Patentee:
THOMSON CONSUMER ELECTRONICS, INC.

Opponent:
IGR GmbH & Co. KG.

Headword:
-

Relevant legal provisions:
EPC Art. 123(3)
RPBA Art. 13(1), 13(3), 15(3)

Relevant legal provisions (EPC 1973):
EPC Art. 100a, 56

Keyword:
"Inventive step (main request - no)"
"Amendments - broadening of claim (1st and 2nd auxiliary requests - yes)"

Decisions cited:
-

Catchword:
-

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Case Number: T 0419/07 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 2 March 2011

Appellant: (Patent Proprietor)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 12 January 2007 revoking European patent No. 0701367 pursuant to Article 102(1) EPC 1973.

Composition of the Board:

Chairman: F. Edlinger
Members: M. Paci
B. Müller

Summary of Facts and Submissions

I. This is an appeal by the patent proprietor against the decision of the opposition division revoking European patent No. 0 701 367.

II. Opposition had been filed against the patent as a whole, based on Article 100(a) EPC 1973 (novelty and inventive step).

III. In the decision under appeal the following prior-art documents were cited:

D1: DE 42 40 187 A1, and
D9: "Programmable Receiver for a Multi-Media System", IBM Technical Disclosure Bulletin, Vol. 36, No. 11, November 1993, 125-26

The opposition division held in the reasons for the decision that the subject-matter of claim 1 according to the main request (patent as granted) lacked novelty in view of D1 and that the subject-matter of claim 1 according to each of the first and second auxiliary requests did not involve an inventive step in view of D9 and D1.

IV. With the statement of grounds of appeal the appellant (patent proprietor) filed sets of amended claims according to a main request and first and second auxiliary requests.

V. In an official communication annexed to the summons to oral proceedings, the board raised objections under Article 84 EPC 1973 and Article 123(2) EPC regarding

claim 1 according to each of the three requests. In addition, the board objected to claim 1 according to each of the first and second auxiliary requests under Article 123(3) EPC.

VI. In a letter dated 31 January 2011, the respondent (opponent) informed the board that it would not be represented at the oral proceedings and requested that the board take account of the respondent's submissions before the opposition division.

VII. With a letter dated 2 February 2011, the appellant filed sets of amended claims according to a main request and first and second auxiliary requests, respectively, replacing all previous claims.

VIII. Oral proceedings were held on 2 March 2011, during which the appellant filed amended claims according to a new main request, replacing all the claims according to the previous main request.

IX. The appellant's final requests are that the decision under appeal be set aside and the patent maintained on the basis of claims 1 to 9 of the main request submitted in the oral proceedings before the board, or alternatively on the basis of claims 1 to 10 according to the first auxiliary request, or claims 1 to 11 of the second auxiliary request, both filed with the letter of 2 February 2011.

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

"A program guide interface comprising a video graphics generator (20) and a microprocessor (18), characterized by:

a source (12) of analog and digital television video signals, each of which is representative of a picture,

both analog and digital television video signals carry program guide information;

means (28) for separating said program guide information from said analog television video signal;

means (14) for separating said program guide information from said digital television video signal;

said microprocessor (18) selecting one of said separated program guide information and routing it to said video graphics generator (20), said video graphics generator formatting a graphics video signal representative of said program guide information;

means (22) for selecting one of said analog or digital television video signals; and

means (24) for combining said graphics video signal with said selected analog or digital television video signals

to generate a combined video display signal (OUTPUT VIDEO (Y,C)) including said program guide information and said selected analog or digital television video signal."

Claims 2 to 9 according to the appellant's main request are dependent on claim 1.

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

"A program guide interface, characterized by:

a source (12) of first and second digital video signals, each of which is representative of a picture and each of which carries program guide information;

means (28 or 14) for separating respective one of said program guide information from each one of the first and second digital video signals;

a video graphics generator (20);

a microprocessor (18) for routing each said separated program guide information to said video graphics generator (20), said video graphics generator formatting a graphics video signal representative of each said program guide information; and,

means (24, 22) for combining said graphics video signal with any one of said first and second digital video signals to generate a combined video display signal (OUTPUT VIDEO (Y,C)) including said program guide information and any one of said pictures, said combining means comprising a first multiplexer (22) for selecting between said first and second digital signals for display, and a second multiplexer (24) for selecting between said previously selected one of said first and second digital video signals and said graphics video signal."

Claims 2 to 10 according to the appellant's first auxiliary request are dependent on claim 1.

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

"A program guide interface, characterized by:

a source (12) of first and second digital video signals, each of which is representative of a picture and each of which carries respective program guide information;

means (28 or 14) for separating respective one of said program guide information from each one of said first and second digital video signals;

a video graphics generator (20);

a microprocessor (18) for routing each said separated program guide information to said video graphics generator (20), said video graphics generator formatting a graphics video signal representative of each said program guide information; and,

means (24, 22) for combining said graphics video signal with any one of said first and second digital video signals to generate a combined video display signal (OUTPUT VIDEO (Y,C)) including said program guide information and any one of said pictures, the microprocessor separating and routing said program guide information from a selected one of said first and second digital video signals according to a predetermined selection priority and combining with a selected one of the first and second digital video signals."

Claims 2 to 11 according to the appellant's second auxiliary request are dependent on claim 1.

XIII. In the decision under appeal the opposition division's reasoning regarding claim 1 according to the then first

auxiliary request, the subject-matter of which is closest to that of claim 1 according to the present main request, can be summarised as follows:

D9 discloses a programmable television receiver (see figure) which comprises an RF tuner section with multiple tuner modules 14 for different television signals. Some of these signals are analog (NTSC/PAL/SECAM) and some are digital (US-HDTV). A primary and a secondary video channel interface (28 and 30) are able to select an arbitrary one of said signals from said tuner section using media bus 16. This part of the figure thus constitutes a first multiplexer as claimed in claim 1. D9 also discloses a teletext decoding circuit (ref. VBI/CC decode), the output of which may be multiplexed with the output of said first and second video channel interfaces using a second multiplexer (ref. MUX) in accordance with claim 1 and a microprocessor (ref. MICRO CONTROLLER).

Since D9 does not mention the use of Electronic Program Guide (EPG) information in the teletext, the subject-matter of claim 1 is novel over D9.

However, if the objective problem is that the user is to be provided with such EPG information within the context of D9, the skilled person, being aware of the teachings of, for example, D1, will adapt the VBI/CC decoding circuit to additionally provide EPG generation. This step is straightforward.

The subject-matter of claim 1 thus derives in an obvious manner from D9 and lacks an inventive step.

XIV. The appellant essentially argued as follows:

Admissibility of the main request

The claims according to the main request filed during the oral proceedings overcome all the objections under Article 84 EPC 1973 and Article 123(2) EPC raised by the board during the oral proceedings and in the communication annexed to the summons to oral proceedings. These amendments were not filed earlier because of the previous professional representative's departure from the company at the end of 2010. Since the amendments are straightforward and do not complicate the case, they should be admitted into the appeal proceedings.

Main request - inventive step

D9 is concerned with providing a television receiver that includes multiple tuners connected to a processing section via a media bus. D9 says nothing with regard to program guide information associated with the data received on the tuners. Hence D9 fails to show a source of analog and digital television video signals where each of these signals carries program guide information, and means for separating said program guide information from each of the analog and digital video signals. Moreover, even if the receiver of D9 were construed as being inherently able to separate the program guide information from the input signals, D9 would still be completely silent as to combining a digital television video signal with program guide information separated from an analog television video signal, and *vice versa*. D9 does not give any hint as to why it would be

desirable to provide such a feature. By contrast, the present invention specifically mentions the problem of providing a unified program guide interface in a hybrid (analog/digital) system.

Therefore, D9 does not provide, let alone recognise, the problem and the solution identified by the present invention. Accordingly, the subject-matter of claim 1 according to the main request is not rendered obvious by the disclosure of D9.

First and second auxiliary requests - Art. 123(3) EPC

The paragraph from page 8, line 30, to page 9, line 2, of the application as filed (corresponding to paragraph [0027] of the patent specification) provides support for the feature that the first and second video signals may both be digital signals. Therefore, the amendments are in compliance with Article 123(2) and 123(3) EPC.

XV. The respondent did not present arguments during the appeal proceedings but merely referred to the arguments submitted before the opposition division.

Reasons for the Decision

1. The appeal is admissible.

Procedural matters

2. Admissibility of the main request

According to Article 13(1) RPBA (Rules of Procedure of the Boards of Appeal, OJ EPO 2007, 536), any amendment to a party's case after it has filed its grounds of appeal may be admitted and considered at the board's discretion. The discretion shall be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy. Article 13(3) RPBA further provides that amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the board or the other party or parties cannot reasonably be expected to deal with without adjournment of the oral proceedings.

In the present case, the appellant filed during the oral proceedings before the board a set of amended claims 1 to 9 according to a new main request.

The board noted that the amendments made to claim 1 were of a straightforward nature and along the lines the appellant was expected to react in order to overcome the board's (at least partly) new objections under Article 84 EPC 1973 and Article 123(2) EPC against amended claims which had been filed in time before the oral proceedings. The board considered that these clarifying amendments reduced the complexity of

the subject-matter of claim 1 without substantially shifting its subject-matter and could be examined as to inventive step on the basis of the facts and arguments already on file. The dependent claims were either left substantially unchanged or deleted. The board was thus in a position to deal with these amendments without adjourning the oral proceedings.

The respondent, who was duly summoned, decided not to attend the oral proceedings. In accordance with the provisions of Article 15(3) RPBA, the board is not obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying only on its written case. As indicated above, the amendments made to claim 1 could be expected.

For the above reasons and since the amendments required no adjournment of the oral proceedings, the board decided to admit the main request into the proceedings.

Main request - Inventive step (Article 100(a) EPC 1973 and Article 56 EPC 1973)

3. The closest prior art

D9 discloses a programmable television receiver for a multi-media system. The receiver (see figure) comprises two main sections: an RF tuner section (10) and a media bus interface section (12).

The RF tuner section (10) has a modular structure: it includes different tuner modules (14) for receiving and

demodulating television signals in all of the main television formats utilised in 1993 when D9 was published. Some of the supported television formats cited in D9 are analog (e.g. NTSC, PAL, SECAM) whereas at least one is digital (US HDTV). Each of the tuner modules outputs a common format digital video signal which is fed along a media bus (16) to the media bus interface section (12).

The media bus interface section (12) includes *inter alia* an integrated micro-controller (22), primary and secondary video channel interfaces (28,30) and a teletext decoder (VBI/CC DECODE). The micro-controller controls all aspects of the receiver, including channel selection. The primary and secondary video channel interfaces also provide support for up to two RF tuner sections, each selecting one of the (analog or digital) channels, so that a live picture-in-picture can be presented "with different channel information contained in each picture" (D9, page 126, paragraph 2). The teletext decoder provides teletext information contained within the vertical blanking interval of an analog television signal.

Although D9 does not explicitly mention a video graphics generator, the board regards it as implicit in the disclosure of D9 that the receiver must include a video graphics generator in order to present, for instance, teletext and closed caption information to the viewer (D9, page 126, paragraph 3).

4. The distinguishing features

The program guide interface of claim 1 according to the main request therefore **differs** from the receiver of D9 by the following features:

- both analog and digital television video signals carry program guide information (whereas D9 only discloses teletext information carried on an analog television video signal);
- means for separating said program guide information from said analog television video signal;
- means for separating said program guide information from said digital television video signal;
- said microprocessor selecting one of said separated program guide information and routing it to said video graphics generator, said video graphics generator formatting a graphics video signal representative of said program guide information; and
- means (24) for combining said graphics video signal with said selected analog or digital television video signals to generate a combined video display signal including said program guide information and said selected analog or digital television video signal.

5. The objective technical problem

The **technical effect** resulting from the distinguishing features is that the program guide interface provides program guide information irrespective of whether the program guide information was carried by an analog

television video signal or by a digital television video signal (see paragraphs [0006], [0007] and [0027] of the patent specification). For instance, the program guide interface can combine a digital television video signal with program guide information carried by an analog television video signal or, alternatively, an analog television video signal with program guide information carried by a digital television video signal.

The **objective technical problem** to be solved can therefore be defined as being "to provide a unified program or channel guide function which is compatible with hybrid systems receiving both analog and digital signals", as stated in paragraph [0006] of the patent specification.

6. Obviousness

The receiver of D9 is a hybrid receiver which can receive and decode both analog and digital television signals according to various formats and which, as stated on page 126 of D9, has an RF tuner section (10) which is built in accordance with a modular concept, so that new formats can easily be added by developing new tuner modules (14) as they become necessary.

The appellant does not dispute that, as acknowledged in paragraph [0004] of the patent specification, it was known before the earlier priority date of the patent to transmit program guide information either with an analog television video signal (e.g. as a teletext signal transmitted in the vertical blanking interval of the video signal) or with a digital television video

signal (e.g. as part of the PSI table according to the MPEG-2 standard). Received program guide information was commonly converted to a graphics video signal to be displayed on a television screen either by itself or superimposed with the corresponding television video signal.

It would thus have been straightforward for the skilled person to modify the hybrid receiver of D9 so that it could decode and display program guide information transmitted with the received analog (e.g. PAL) or digital (e.g. US HDTV or MPEG-2) television video signals.

Furthermore, the primary and secondary video interfaces (28 and 30) of the receiver of D9 have means for combining the television video signals of two different channels in order to generate a live picture-in-picture. These two different channels may be any combination of analog and digital channels (i.e. both analog, both digital or analog-and-digital) because the primary and secondary video interfaces (28 and 30) receive all video signals via the media bus (16) on which all the video signals have a common digital video format output by RF tuner (10) regardless of whether these video signals were initially received by the RF tuner as analog or digital signals. The user of a receiver of the kind disclosed in D9 is free to choose any television video signal provided by one tuner and teletext, for instance as a picture-in-picture, provided by the second tuner. If a television program is broadcast in different formats (digital and analog) and only one, or some, of these formats provides program guide information, the advantage of selecting

any available program guide information in combination with the viewed television program is immediately apparent: the user gets desirable information relating to the program viewed.

Thus, summarising, the skilled person would have arrived without inventive effort at the subject-matter of claim 1 by merely modifying the television receiver of D9 and making good use of the modular structure of the tuner section and the common format provided on the media bus in order to enable it to receive and decode program guide information transmitted in a known manner with analog and digital television programs.

7. Conclusion

For the above reasons, the subject-matter of claim 1 according to the main request does not involve an inventive step in view of D9.

Accordingly, the appellant's main request is not allowable.

First and second auxiliary requests - Article 123(3) EPC

8. According to Article 123(3) EPC "[t]he European patent may not be amended in such a way as to extend the protection it confers". Regarding the extent of protection, Article 69 EPC provides that "[t]he extent of the protection conferred by a European patent or a European patent application shall be determined by the claims. Nevertheless, the description and drawings shall be used to interpret the claims". The Protocol on the Interpretation of Article 69 provides further

guidance as to the application of the provisions of Article 69 EPC.

9. In the present case, claim 1 of the granted patent, the sole independent claim, defines a program guide interface characterised *inter alia* by the following features (emphasis added by the board):

- a source (12) of **analog** and digital video signals, each of which is representative of a picture, at least one of which carries program guide information;
- means (28 or 14) for separating said program guide information from at least one of said **analog** and digital video signals; and
- means (24, 22) for combining said graphics video signal with any one of said **analog** and digital video signals to generate a combined video display signal (OUTPUT VIDEO (Y,C)) including said program guide information and any one of said pictures.

From the above wording of claim 1 of the patent, it is clear that the separating means is capable of separating program guide information both from said analog video signal and from said digital video signal, even though it might be used for separating program guide information from only one of them ("at least one"). Similarly, the combining means can combine the graphics video signal with an analog video signal and it can also combine the graphics video signal with a digital video signal.

The above construction of claim 1 of the patent as granted is also confirmed by the description and drawing of the patent which consistently describe the

invention as a program guide interface for a hybrid system receiving both analog and digital channels (see in particular, paragraphs [0001] to [0006] of the patent specification).

By way of contrast, claim 1 according to each of the first and second auxiliary requests defines a program guide interface wherein the "analog and digital video signals" of claim 1 of the granted patent have been replaced by "first and second digital video signals". As a result, the separating means and the combining means no longer need to be capable of operating on analog video signals. In the board's view, these amendments to claim 1 thus extend the protection conferred by the patent as granted, in violation of the provision of Article 123(3) EPC.

10. The appellant's arguments

The appellant argued that claims 1 according to the first and second auxiliary requests comply with the requirements of Article 123(3) EPC because paragraph [0027] of the patent specification (corresponding to paragraph from page 8, line 30, to page 9, line 2, of the application as filed) provides support for the feature that the first and second video signals may both be digital. Paragraph [0027] reads as follows:

"The unified program guide interface taught herein enables any input video signal selected for display to be displayed with program or channel guide information, irrespective of whether the selected video signal is of digital or analog origin, irrespective of whether the selected video signal carries program or channel guide

information, and irrespective of whether the program guide information is carried in another analog signal, another digital signal or an information signal."

The board sees no reason why the above paragraph of the description would invalidate the board's reasoning under section 9 *supra*. The appellant has not submitted any reasoned argument in this respect. If anything, the paragraph cited by the appellant confirms the board's interpretation that the program guide interface according to claim 1 of the granted patent must have separating means and combining means capable of dealing both with digital and analog video signals.

11. Conclusion

The appellant's first and second auxiliary requests are not allowable because claim 1 of each of these requests extends the protection conferred in violation of the provisions of Article 123(3) EPC.

Conclusion

12. 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:

L. Fernández Gómez F. Edlinger