

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen
(D) [] No distribution

**Datasheet for the decision
of 5 June 2008**

Case Number: T 1102/04 - 3.5.04

Application Number: 99901298.2

Publication Number: 1046284

IPC: H04N 5/445

Language of the proceedings: EN

Title of invention:

Graphic layout controller for television environment

Patentee:

Amiga Development LLC

Opponent:

IGR GmbH & Co. KG

Headword:

-

Relevant legal provisions:

RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):

EPC Art. 56

Keyword:

"Inventive step - yes"

Decisions cited:

-

Catchword:

See point 4.1



Case Number: T 1102/04 - 3.5.04

DECISION
of the Technical Board of Appeal 3.5.04
of 5 June 2008

Appellant: IGR GmbH & Co. KG
(Opponent) Bahnstraße 62
D-40210 Düsseldorf (DE)

Representative: Eichstädt, Alfred
Maryniok & Partner
Kuhbergstraße 23
D-96317 Kronach (DE)

Respondent: Amiga Development LLC
(Patent Proprietor) 600 North Derby Lane
North Sioux City
SD 57049 (US)

Representative: Beresford, Keith Denis Lewis
BERESFORD & Co.
16 High Holborn
London WC1V 6BX (GB)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 1 July 2004
rejecting the opposition filed against European
patent No. 1046284 pursuant to Article 102(2)
EPC 1973.

Composition of the Board:

Chairman: F. Edlinger
Members: A. Teale
B. Müller

Summary of Facts and Submissions

I. The appeal is against the decision by the opposition division rejecting the opposition against European patent no. 1 046 284.

II. The opposition was based on lack of inventive step in the light of, amongst other documents, D7 alone or D7 combined with D8, these documents being as follows:

D7: G. Eitz, "Zukünftige Informations- und Datenangebote beim digitalen Fernsehen - EPG und 'Lesezeichen'", Rundfunktechnische Mitteilungen, no. 41, 1997, vol. 2, pages 67 to 72.

D8: I. Dahm, C. Griwodz, R. Steinmetz, "MHEG: Codierverfahren für Multimedia- und Hypermedia-Anwendungen", Fernseh- und Kinotechnik, 50th year, no. 3/1996, pages 115 to 118.

III. The granted patent has three independent claims, these having the following text:

"1. A computer system (110) for use in displaying a video image received as television signals originating from a broadcaster, the system comprising: control means (53, 52) for controlling a display screen to display objects comprising the video image (1) and graphics images (3) selectively overlaying the video image; and memory means (55) for storing data (4, 16, 27, 38) defining the manner in which the video image is to be overlaid by the graphics images;

characterised in that the data is stored in a graphics layout language independently defining the size and position of each object to be displayed; and wherein the system comprises means (50) for updating the stored data with new data defined by the broadcaster and received in a broadcast data signal."

"13. A method of operating a computer system (110) to display a video image received as television signals originating from a broadcaster, the method comprising: controlling a display screen to display objects comprising the video image (1) and graphics images (3) selectively overlaying the video image; and storing data (4, 16, 27, 38) defining the manner in which the video image is to be overlaid by the graphics images;

characterised in that the data is stored in a graphics layout language independently defining the size and position of each object to be displayed; and wherein the system updates the stored data with new data defined by the broadcaster and received in a broadcast data signal."

"24. A computer readable medium comprising computer readable instructions for controlling a computer to carry out the method of any one of claims 13 to 23."

IV. In the appealed decision it was found that the subject-matter of claims 1, 13 and 24 differed from the disclosure of D7 essentially in the received data being stored in a graphics layout language and defining the size and position of each object to be displayed. D7 taught away from the solution proposed in the patent, since it explicitly stated that internet features

should not be directly adopted (see page 68, last sentence of 2nd full paragraph). Thus, even if the combination of a TV set with a set top box described in D7 were to be interpreted as a computer system in the sense of the patent, it would not have been obvious for a skilled person to modify the known system such that the size and position of the objects to be displayed were variably defined, let alone that this be done in a graphics layout language. The limited processing power of a set-top box would also have led the skilled person away from this solution.

As to the combination of D7 and D8, D8 did not mention data defining the size and position of the object to be displayed being stored in a graphics layout language. D8 related to the use of MHEG in multimedia and interactive TV. However MHEG was a coding technique and not a graphics layout language. Thus, although D8 contained the general statement in section 3 that MHEG was capable of formally defining the characteristics of graphical objects, it was not equivalent to the manner in which objects were stored and defined according to the independent claims.

- V. A notice of appeal was received from the opponent, requesting that the decision be set aside, that the patent be revoked and making an auxiliary request for oral proceedings. The appellant subsequently filed a statement of grounds of appeal, arguing essentially that claims 1, 13 and 24 lacked inventive step in view of D7 alone or D7 combined with the coding method MHEG described in D8, MHEG being a graphics layout language in the sense of the claims.

- VI. In a letter dated 26 October 2006 the appellant submitted a change of name and filed a copy of the corresponding extract from the German commercial register.
- VII. In a communication annexed to a summons to oral proceedings the board expressed its preliminary opinion, questioning amongst other things whether the skilled person starting from D7 would have consulted D8, since D8 stated that MHEG was not a programming language (see page 115, right column, lines 33 to 38) and did not define "Look and Feel" (see page 117, left column, lines 11 to 13).
- VIII. The appellant, in a letter dated 5 May 2008, made further arguments as to lack of inventive step in view of the combination of D7 and D8. If the board was not satisfied that the example shown on page 118 of D8 proved that MHEG-5 audio and video were dealt with as separate objects and that MHEG-5 defined the "Look and Feel", the appellant submitted the following documents as additional evidence:

D11: Draft International Standard ISO/IEC DIS 13522-5, 6 December 1995, "Information Technology - Coding of Multimedia and Hypermedia Information - Part 5: Support for Base-Level Interactive Applications", cover page and pages 3 to 4, 7 to 16, 104 to 106, 120 to 121, 137 and 142 to 143.

D12: K. Hofrichter, "MHEG 5 - Standardized Presentation Objects for the Set Top Unit Environment", Interactive Distributed Multimedia Systems and

Services, 4 March 1996, pages 33 to 44,
XP 000672134.

- IX. In a fax dated 6 May 2008 the respondent argued essentially that D7 did not disclose the stored data controlling the size and position of each object to be displayed, the expression "each object" including the video image received as television signals and graphics images selectively overlaying the video image. According to the invention, the data stored in a graphics layout language could be stored in advance and updated with new data in respect of each channel. Moreover, according to D8, section 3, MHEG was not a programming language but a descriptive form to allow a computer-platform-independent description of multimedia presentations. Furthermore MHEG was only intended to define structure and layout, not the "Look and Feel"; see D8, section 5. Thus even the result of combining D7 and D8 would not fall within the scope of claim 1. The respondent requested that the patent be maintained in its entirety. In the event that the board was minded to find in favour of the appellant, the respondent requested the opportunity of attending oral proceedings before any such decision.
- X. In a fax dated 27 May 2008 the respondent announced that it was "currently the intention of the patent proprietor not to attend the oral proceedings".
- XI. Oral proceedings were held before the board on 5 June 2008 in the absence of the respondent. The appellant requested that the decision under appeal be set aside and that the patent be revoked in its entirety. The board construed the respondent's defending the patent

in the fax dated 6 May 2008 as an implicit request that the appeal be dismissed.

XII. The appellant's arguments may be summarized as follows. The "graphics layout language" referred to in the claims served to transmit the properties of overlapping objects. The subject-matter of claims 1, 13 and 24 lacked inventive step in view of D7 alone. D7 disclosed the broadcast of TV signals having a data channel containing Electronic Programme Guides (EPGs) and other applications and services; see page 68, last paragraph. The data presented in an EPG was transmitted in a format defined in the DVB (Digital Video Broadcasting) standard as "SI data" while the "Look and Feel" and functionality of an EPG were transmitted separately as "Applikation EPG" data. D7 did not state that "Look and Feel" data was constantly transmitted so that the claimed updating of the stored data occurred by means of the "Applikation" data, but updating would occur even if it were constantly transmitted (indeed the claims did not exclude this). D7 did not however disclose defining the size and position of each object to be displayed and the treatment of the video image as an object. According to the patent (see paragraph [0009]), the problem to be solved was to allow broadcasters to broadcast unobstructed graphical symbols and other information to viewers. The size and position of each object would form part of the broadcast "Look and Feel" information. Moreover treating the video image as an object was not critical in solving the problem; what mattered was to specify the overlap of various objects.

The subject-matter of claims 1, 13 and 24 also lacked inventive step in view of D7 combined with D8. Again, the problem to be solved was to allow broadcasters to broadcast unobstructed graphical symbols and other information to viewers. The above difference features between the subject-matter of claims 1, 13 and 24 and the disclosure of D7 were known from D8. According to D8 (page 115, left column, lines 7 to 13, and middle column, lines 8 to 14), MHEG allowed a structured presentation of overlaid objects by content providers ("Anbieter") and was particularly suited to interactive TV and video-on-demand. Page 115, right column, lines 20 to 30, in particular line 28 (see "Filme"), showed that the video image was treated as an object in D8. D8 also referred to D11 in its list of references (page 118, reference [2]). D11, a draft international standard, stated that video images could be treated as objects. D12 related specifically to MHEG-5, figure 7 on page 43 illustrating an MHEG Engine. MHEG was a descriptive language similar to HTML which was used in the embodiments of the opposed patent.

XIII. At the end of the oral proceedings the board announced its decision.

Reasons for the Decision

1. The appeal is admissible.

2. *Document D7*

D7 concerns the decoding by a set top box of a digital multiplex television signal containing an EPG

application for display on a television. While the selected television program continues to be displayed in the background the user can use the EPG in the foreground to call up information on the selected program; see page 68, paragraph bridging the two columns. The EPG and other applications are transmitted in a data channel of the multiplex signal, the program details - such as channel names, broadcast times and program titles - being transmitted as "service information" ("SI Daten" in figure 3) in a format defined in the DVB (Digital Video Broadcasting) standard; see page 68, right column, last paragraph. The "Look and Feel" and functionality of the applications are however transmitted separately from the program details ("Applikation EPG" in figure 3) in a programming language such as Mediahighway or OpenTV or possibly later in Java; see page 68, right column, last sentence.

In view of the reference to the selected television program being displayed in the background, it is clear that D7 does not disclose a video image occupying less than the whole screen. Moreover figure 3 shows that the video images which are received as television signals ("Prog. 1" and "Prog. 2") are transmitted separately from the "Look and Feel". Hence the board understands that the video images are not treated as objects, but merely transmitted and displayed as (normal) television program videos which may be overlaid by objects such as the EPG.

The "Look" of an application is understood by the board to include the size and position of objects to be displayed. Hence the board understands the reference in

D7 to the programming language Mediahighway or OpenTV or, in the future, even Java as disclosing the use of a graphics layout language to define the size and position of the elements which are displayed in the EPG. D7 also states that the processing power and memory of the then available set top boxes was less than that of multimedia PCs; see page 69, left column, first sentence.

Hence D7 discloses a computer system and a corresponding method of operating a computer system (see page 67, right column, lines 6 to 3 from the bottom) to display a video image received as television signals originating from a broadcaster, the system comprising: control means (implicit from the above cited passage) for controlling a display screen to display the video image and graphics images selectively overlaying the video image; and memory means (see page 69, left column, first sentence) for storing data defining the manner in which the video image is to be overlaid by the graphics images (page 68, paragraph bridging the two columns and figure 2), wherein the data is stored in a graphics layout language and wherein the system comprises means (see figure 3, "Applikation EPG") suitable for updating the stored data with new data defined by the broadcaster and received in a broadcast data signal. Although updating itself is not mentioned in D7 this is implicit from the manner in which the data is transmitted.

3. *Document D8*

D8 concerns the MHEG (Multimedia and Hypermedia Experts Group) family of standards for exchanging coded data on

multimedia objects in a platform-independent manner; see the paragraph bridging pages 115 and 116. Platform-independence is achieved by the MHEG code being processed by a platform-specific MHEG "Engine". MHEG describes the properties of interchanged objects, such as their size and position; see page 115, right column, lines 25 to 29, and page 118, box 1, right column, in particular the lines "(:size 180 340)" and "(:position 50 120)". For this reason, contrary to the preliminary view expressed by the board in the communication annexed to the summons to oral proceedings, the appellant has convinced the board that MHEG can be regarded as a graphics layout language in the meaning of the opposed patent which also uses the similar descriptive language HTML (possibly in combination with Java; see figures 3C, 4B, 5B, 6B and 7B and paragraph [0044]). The statement on page 117, left column, lines 11 to 13, that MHEG should merely define structure and layout and not "Look and Feel" is not understood as contradicting this interpretation of D8. Construing D8 so as to make technical sense, the expressions "structure" and "layout" are understood to cover object properties such as size and position, which according to present claims 1 and 13, are the properties of the objects to be defined by the graphics layout language (not the "Look and Feel").

4. *Documents D11 and D12*

4.1 *Admissibility*

The submissions relating to D11 and D12 constitute amendments to the appellant's case, Article 13(1) RPBA (OJ EPO 11/2007, 536), according to which these

amendments may be admitted and considered at the board's discretion. Other parties shall be entitled to submit their observations, Article 13(2) RPBA, and 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, Article 13(3) RPBA. In the present case D11 and D12 both relate to D8, indeed D11 is referred to in D8, and merely provide more detail on the MHEG standards, in particular the MHEG-5 standard. They were moreover filed a month before the oral proceedings so that the respondent and the board had sufficient time to study them, the respondent not having requested that these documents be excluded. Consequently the board admitted the amendments relating to D11 and D12 in the oral proceedings. It is more convenient to consider D12 first.

4.2 *Document D12*

According to the abstract of D12, MHEG-5 (a member of the MHEG family of standards) addresses the encoding of the behaviour and layout of multimedia applications and is designed for low-resource environments such as set top units. Only the import and export data formats are standardized by MHEG, systems using MHEG having to define a mapping from their internal data representation to the facilities provided by MHEG; see page 33, "Introduction", lines 8 to 11. The MHEG-5 class hierarchy shown on page 38 in figure 4 shows that video images can be treated as objects.

4.3 *Document D11*

D11 comprises extracts from a draft international standard relating to MHEG-5. According to page 10, lines 17 to 19, an MHEG-5 application is made up of scenes and objects that are common to all scenes. A scene contains a group of objects used to present information such as graphics, sound and video. Hence D11 also mentions the possibility of video images being treated as objects.

5. *Inventive step*

5.1 *The closest prior art*

It is common ground between the parties, and the board agrees, that D7 forms the closest prior art. The subject-matter of claims 1 and 13 differs from D7 in that the video image received as television signals is comprised in the objects to be displayed and in data defining the manner in which the video image object is to be overlaid by the graphics image objects being stored in a graphics layout language independently defining the size and position of each object to be displayed. In addition, the subject-matter of method claim 13 differs from D7 in a method step of updating the stored data with new data defined by the broadcaster and received in a broadcast data signal.

The technical effects achieved by these features as set out in the description (for instance paragraphs [0002] to [0013], [0030], [0035] and [0055]) may be summarized as giving the broadcaster control over the size, position and relationship of each of the objects of the

broadcast content to be displayed even for different display systems or user options relating to the display of the objects. The control may be channel specific and varied over time by updating the stored data.

5.2 *The objective technical problem*

The board regards the objective technical problem as being to permit broadcasters to have greater control to broadcast unobstructed graphical symbols and other information to viewers, this being derivable from paragraph [0009] of the patent. Given the reference in D7 to data defining the "Look and Feel" of applications being transmitted, the skilled person starting from D7 would have considered such a problem as a usual matter of design; see page 68, right column, last 5 lines and figure 3.

5.3 *Inventive step in view of D7 alone*

In the light of the statement in D7 that the "Look and Feel" of an EPG application might, in the future, even be coded in Java, a graphics layout language, the person skilled in the art would have taken into account the possibility of using Java in implementing the EPG application. However D7 (page 68, last paragraph) merely mentions Java as an alternative (possibly in combination with) known middleware. This would not have solved the problem as already set out in paragraph [0008] of the patent specification. Concerning HTML, D7 (page 68, left column, paragraphs 1 to 3) teaches that this would not be appropriate for the applications described in D7 (published in the year before the priority date of the opposed patent). The

board can therefore see no hint in D7 at also treating the video image as an object, rather than as merely a background over which other objects are overlaid; see the paragraph on page 68 bridging the two columns. Indeed D7 teaches a strict separation between the video images of the received television signals and objects of the EPG, figure 3 showing the video images ("Prog. 1" and "Prog. 2") being separated from the objects in the "Applikation EPG" signal. The board finds that there would have been no obvious reason for the skilled person to treat the video image as an object. Since this feature is set out in claims 1 and 13, it is consequently not necessary in the case of claim 13 to further consider whether additionally updating the stored data would also have been inventive.

5.4 *Inventive step in view of the combination of D7 and D8, also taking D11 and D12 into account*

Since D7 gives a non-exhaustive list of possible programming languages for transmitting the "Look and Feel" of the EPG application (see page 68, right column, last 5 lines), the skilled person would have considered MHEG-5, known from D8 and further explained in D11 and D12, as a usual matter of design, particularly because of the known suitability of MHEG-5 for set top boxes; see D8, paragraph bridging pages 116 and 117 and D12, abstract, lines 5 to 8. In applying the teaching of D8 to the disclosure of D7 the skilled person would have stored data independently defining in a graphics layout language (MHEG-5) the size and position of each object (of the EPG application) to be displayed as a usual matter of design. However, although the MHEG-5 standard allows for the possibility of treating the video image

as an object, the board can find no hint in D7 or D8 to include the video image of the received television signals among the objects for which data is stored. Neither D7 nor D8 gives any hint as to how broadcasters might be given better control of the broadcast event to allow them to determine the size and position of each object to be displayed and thus prevent overlaid graphics images (such as a logo) from being covered by another displayed object ([0002]), and thus to allow graphical symbols and other information to be broadcast unobstructed to viewers. Hence the board finds that there would have been no obvious reason for the skilled person to treat the video image as an object. As above, since this feature is set out in claims 1 and 13, it is not necessary in the case of claim 13 to further consider whether additionally updating the stored data would also have been inventive.

5.5 *Conclusion on inventive step*

In view of the above, the subject-matter of independent claims 1 and 13 involves an inventive step, Article 56 EPC 1973. The subject-matter of claim 24, which sets out a computer readable medium comprising computer readable instructions for controlling a computer to carry out the inventive method of any one of claims 13 to 23, consequently also involves an inventive step, Article 56 EPC 1973.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

D. Sauter

F. Edlinger