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**Datasheet for the decision  
of 4 May 2016**

**Case Number:** T 1773/10 - 3.5.07

**Application Number:** 03738745.3

**Publication Number:** 1520273

**IPC:** G11B20/10

**Language of the proceedings:** EN

**Title of invention:**

Read-only recording medium containing menu data and menu displaying method therefor

**Applicant:**

LG Electronics, Inc.

**Headword:**

Menu data structure/LG ELECTRONICS

**Relevant legal provisions:**

EPC Art. 56, 113(2), 123(2)

**Keyword:**

Amendments - added subject-matter (yes)  
Inventive step - (no) (all requests)  
"Supplemental requests"

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

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Case Number: T 1773/10 - 3.5.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.07**  
**of 4 May 2016**

**Appellant:** LG Electronics, Inc.  
(Applicant) 20, Yoido-Dong,  
Youngdungpo-gu  
Seoul 150-010 (KR)

**Representative:** Diehl & Partner GbR  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted on 22 February  
2010 refusing European patent application No.  
03738745.3 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman** R. Moufang  
**Members:** M. Rognoni  
P. San-Bento Furtado

## **Summary of Facts and Submissions**

I. The applicant (appellant) appealed against the decision of the Examining Division to refuse the European patent application no. 03738745.3 which was originally filed as international application PCT/KR2003/001317 and published as WO 2004/006252.

II. In the contested decision, the Examining Division considered that the subject-matter of claim 1 according to the request filed at the oral proceedings of 19 January 2010 did not involve an inventive step according to Article 56 EPC in view of the following prior art:

D1: US-A-2001/052127, published on 13 December 2001

D2: US-A-5 963 704, published on 5 October 1999.

III. In reply to the summons to oral proceedings before the Examining Division, the applicant had filed a main request of procedural nature and first to third auxiliary (substantive) requests with letter dated 18 December 2009.

The main request (cancellation of the oral proceedings and continuation in writing on the basis of the auxiliary requests) was later withdrawn by the applicant.

The first to third auxiliary requests were not admitted, since in the Examining Division's opinion the corresponding independent claims reintroduced a clarity issue which had already been overcome and thus represented a step backwards in the procedure.

- IV. With the statement of grounds of appeal dated 2 July 2010, the appellant filed a new main request and a new first auxiliary request, respectively based on the first and second auxiliary requests submitted in the first instance proceedings with the letter of 18 December 2009.
- V. As indicated in the statement of grounds of appeal (see in particular section 6), the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request, and if necessary, with one or more of the "alternative amendments indicated in section 5 of the statement of grounds of appeal".

In the event that neither the claims for the main request nor the claims for an alternative main request could be allowed, the appellant requested that a patent be granted on the basis of the claims for the auxiliary request, and, if necessary, with one or more of the alternative amendments indicated in section 5 of the statement of grounds of appeal.

In section 5 of the statement of grounds of appeal, the "alternative amendments" were named "Supplemental requests" and were worded as follows:

- "In case the use of the term 'recording medium' used in claims 5 and 9 for the Main as well as for the Auxiliary Request should be objected to, it is requested that this term be replaced by the term 'computer readable medium' used in claim 1 or by a term considered acceptable by the Board."
- "In the event that the Board does not agree with the argumentation presented above that the

invention is not limited to a read-only medium, it is requested to amend the term 'computer readable medium' and 'recording medium' into an acceptable term."

- "It is further requested to allow the applicant to file further amendments during the procedure that take care of objections raised by the Board, e.g. a different arrangement of the technical features with respect to the preamble and the characterising part of the claims, or of a more substantive manner."

VI. In a communication accompanying the summons to oral proceedings dated 25 January 2016, the Board expressed the following preliminary opinions:

- claim 1 according to the main request appeared not to comply with Article 123(2) EPC;
- the subject-matter of claim 1 according to the main request did not appear to involve an inventive step within the meaning of Article 56 EPC;
- as claim 1 of the first auxiliary request and claim 1 according to the main request appeared to relate essentially to the same subject-matter, the objections raised against the latter remained valid for the former;
- the same could be said for the "supplemental requests".

VII. In reply to the Board's communication, the appellant announced with letter dated 4 April 2016 that it would not attend the oral proceedings scheduled for 4 May 2016, and requested that a decision be based on the current state of the application.

VIII. On 4 May 2016, oral proceedings before the Board were held as scheduled in the absence of the appellant.

IX. Claim 1 according to the main request reads as follows.

"A computer readable medium having a data structure for managing data, comprising:

- a picture data which is formed of an image of a menu page, the menu page being a page for selecting a reproducible data recorded on the recording medium; and
- a menu management information including:
  - a menu page information for managing the menu page; and
  - a number of pages field indicating the number of menu pages managed by the menu management information,

the menu page information including:

- a menu item information for managing a menu item, the menu item being an object contributing to the menu page;
- a default selected item number field indicating a menu item which is selected by default at the initial display of the menu page; and
- a number of menu items field indicating the number of menu items contained in the menu page,

characterized in that

the menu item information includes:

- a display-state control information including information related to the display of the menu item within the menu page and which is used to display one menu item differently from others in the menu page, and
- a neighboring item information indicating a neighbor menu item displayed adjacent to the menu item."

Claim 1 according to the first auxiliary request reads as follows:

"A computer readable medium having a data structure for managing data, the data structure comprising:

- picture data comprising at least one menu page picture, whereby the menu page picture represents a menu page providing selection options for reproducing data recorded on the recording medium; and
- menu management information including:
  - menu page information for managing the menu page; and
  - number of pages information indicating the number of menu pages managed by the menu management information,

the menu page information including:



- menu item information for managing a menu item, whereby the menu item forms part of the menu page picture;
- default selected item number information indicating a menu item which is selected by default at initial display of the menu page; and
- number of menu items information indicating the number of menu items contained in the menu page;

characterized in that  
the menu item information includes:

- display-state control information including information related to the display of the menu item within the menu page in the selected state, and
- neighboring item information indicating a neighbor menu item displayed adjacent to the menu item."

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

Claim 1 according to the main request defined a computer readable medium with a data structure comprising picture data and management information. The picture data was provided in the form of menu page images. The menu management information comprised information indicating the number of menu pages managed and information allowing the managing of each of the menu pages individually. The menu page information contained information for managing the menu items in a menu page, the menu item initially selected in the menu page and the number of menu items present in the menu page. For controlling the display state of the menu

page, the information for managing the menu items contained display-state control information used to display one menu item in the menu page differently from other menu items in the same page, and information indicating a neighbour menu item.

The claimed data structure reflected the embodiment shown in Figures 3, 4 and 5, and explained in the description of the present application as originally filed from page 4, line 26 to page 7, line 6.

Figures 4 and 5 showed the structure of a file 'menu.info' which represented an example of menu management information according to the present invention.

The data structure was described in the original application with respect to a read-only optical disc. However, the invention was not limited to the type of recording medium specified in connection with the preferred embodiment. Furthermore, the invention was presented at page 2, lines 30 and 31 as a solution to a problem related to the menu page construction scheme used for Blu-ray rewritable discs which, as explained at page 2, lines 14 to 23, required a plurality of menu items and an algorithm combining the menu items into a menu page. The only technical feature required for creating a menu page according to the present invention was the storing of files related to the menu page. This feature was not characteristic for a Blu-ray rewritable disc, but common to all digital carriers. Hence, the present invention provided a menu page construction scheme that could be implemented with all digital data carriers.

Furthermore, the originally filed method claims 15 and 22 referred to a menu displaying method for a recording medium. They contained no restriction to a read-only medium.

Therefore, the application as originally filed provided no reason for limiting the application of the present invention to read-only discs.

With respect to the recording medium being a computer readable medium, the description of the disc device for reading a disc medium shown in Figure 7 (see page 7 lines 15 and following) referred to a VDP for processing the read signal for data and control data reproduction. As this implied that the VDP represented a data-processing device and thus resembled a computer, the invention was also disclosed with respect to a computer readable medium.

Document D1 disclosed two different menu supporting methods that enabled the menu of a high-density recording medium to be displayed on a digital television set. The first method was described in paragraphs [0042] to [0046] and [0057] to [0060]. It applied to a player/TV configuration shown in Figure 3 and used a so-called basic menu page containing several menu item representations. Some of these were thumbnail icons retrieved from digest pictures in an MPEG 2 transport stream, as illustrated in Figure 6. The basic menu page was thus composed of a basic picture menu and menu item pictures, whereby the image data were sampled from pictures included in a title or chapter corresponding to the respective menu item. In other words, the basic menu page was not provided as a single image, but had to be composed of several menu image data.

To differentiate the selected menu item from the other menu items of a menu page, OSD (On Screen Display) data were generated by an OSD generator and mixed with A/V menu data relating to a basic menu page. Thus, menu data according to the first embodiment of D1 comprised, for instance, a basic menu page and menu management information, whereby the basic menu contained menu items in the form of thumbnails retrieved from the MPEG 2 transport stream and the management data was used to create OSD data. Several basic menu pages could be grouped in a high-density stream object (HOB) and selected using the management information.

According to a second method disclosed in D1 (paragraphs [0047] to [0056]), a menu page was composed of as many mutually different menu pictures as the menu page contained menu items. The menu data of all menu pictures were coded in an MPEG 2 formatted transport stream, whereby only the video data of the menu picture corresponding to a current selection were displayed at the time.

The present invention provided a graphical representation for each menu page in the form of picture data. For indicating a selection of a menu item in the menu page, the provided menu management information comprised display-state control information enabling a representation of the selected menu item which was different from the representation of the other menu items in the menu page. The management information according to the present invention further comprised information indicating a neighbouring menu item that would be highlighted when changing to the next selection state.

The essential difference to the technical teaching of document D1 was that the present invention provided an already pre-fabricated menu page picture and therefore obviated the need for assembling the graphical representation of the menu page when it needed to be accessed.

Instead of mixing separately created OSD data with the basic menu page video data, the present invention visualised the selection of a menu item within the menu page by modifying the graphical rendition of the part of the menu page picture corresponding to the menu item on the basis of display-state control information associated with the respective menu item.

Starting from the first embodiment of the menu supporting method disclosed in document D1, it was the object of the present invention to provide a more effective menu data scheme.

By providing picture data representing an image of a menu page, the need for assembling the various graphical components of a menu page and for a corresponding combining algorithm was obviated, since all graphical information required was provided within a single menu page image.

By further providing menu management information enabling a differentiation of a menu item selected in the menu page from the respective other menu items in the menu page, the appearance of the menu page image could be adapted to the respective current selection state of the menu page by simple intervention in the decoding process of the menu page picture data. The identification of the menu item neighbouring a currently selected menu item further enabled an

effective adaptation of the menu page to a selection change.

The use of a single menu page picture together with display-state control information according to the present invention did not follow from the two menu supporting methods disclosed in document D1 and therefore was not rendered obvious by this prior art.

Also the other available prior art documents did not contain any teaching which would have led the skilled person to the claimed subject-matter.

The picture data as defined in the independent claims of the first auxiliary request reflected that there might be more than one menu picture present in the data structure. The same arguments given in support of the main request applied also to the first auxiliary request.

### **Reasons for the Decision**

1. The appeal is admissible.

#### Main request

2. Claim 1 according to the main request relates to "[a] *computer readable medium having a data structure for managing data*", which comprises the following features itemised by the Board:

- (a) picture data which is formed of an image of a menu page, the menu page being a page for selecting a reproducible data recorded on the recording medium; and

- (b) menu management information including:
  - (i) a [sic] menu page information for managing the menu page; and
  - (ii) a number of pages field indicating the number of menu pages managed by the menu management information,
- (c) the menu page information including:
  - (i) a [sic] menu item information for managing a menu item, the menu item being an object contributing to the menu page;
  - (ii) a default selected item number field indicating a menu item which is selected by default at the initial display of the menu page; and
  - (iii) a number of menu items field indicating the number of menu items contained in the menu page,
- (d) the menu item information including:
  - (i) display-state control information including information related to the display of the menu item within the menu page and which is used to display one menu item differently from others in the menu page, and
  - (ii) neighboring item information indicating neighbor menu item displayed adjacent to the menu item.

2.2 As pointed out by the appellant (see statement of grounds of appeal, section 2. and marked-up copy), claim 1 of the main request differs from claim 1 of the first auxiliary request considered by the Examining Division, but not admitted into the proceedings, in that the "*menu item information*" comprises display-state control information including information "*which is used to display one menu item differently from others in the menu page*" (feature (d) (i)), and

additionally the *"menu item information"* includes *"neighboring item information"* (feature (d)(ii)).

- 2.3 Feature (d)(i) appears to address the clarity objection that the Examining Division had given as reason for not admitting the first to third auxiliary requests filed in response to the summons to oral proceedings (see points 1 to 1.7 of the contested decision).

Hence, the Board has no objection against the admission of the main request into the appeal proceedings.

Article 123(2) EPC

3. Claim 1 according to the main request is concerned with a *"computer readable medium having a data structure for managing data"*.

In the description of the application as published the recording medium is consistently defined as a *"read-only recording medium"*. For instance, it is stated in lines 8 to 10 of page 1 that *"[t]he present invention further relates to a method for managing menu data of data streams recorded on the read-only recording medium"* (underlining added).

Further references to a *"read-only recording medium"* are in the original title, in the last paragraph of page 2, in section 3 "DISCLOSURE OF INVENTION" on page 3, and in section 5 "MODES FOR CARRYING OUT THE INVENTION". In particular, it is specified in lines 23 to 28 of page 10 of the published application that *"[t]he above-explained menu data managing method for a high-density read-only disc medium such as a BD-ROM can construct a menu page very fast for data streams recorded on a read-only disc medium, and never*



*construct wrong menu pages including unrelated menu items that could be made from malfunction in conventional menu page constructing operation"* (underlining added).

3.1 In the letter dated 15 December 2006 written in response to the Examining Division's first communication (see page 2, fourth paragraph), the applicant explained that the restriction to a "read-only" recording medium had been deleted as such restriction was not found in the corresponding method claims 15 to 22 as originally filed (cf. statement of grounds of appeal, page 5, last paragraph).

3.2 Indeed, original claim 15 and its dependent claims 16 to 22 are directed to a "menu displaying method for a recording medium". However, claim 15 specifies only that a "menu page picture" is read from the recording medium, whereas it is undetermined where the "display-state control information" comes from. Claims 15 to 22 do not mention "menu data for data stream" recorded on a recorded medium, as recited in claim 1 of the published application, and, in particular, do not specify that "menu data" includes at least "one menu page picture" and "display-state control information" (see claim 1 as published).

Hence, claims 1 to 14 and claims 15 to 22 as originally filed relate to different inventions which may involve different recording media. Furthermore, since the description consistently refers to read-only discs, it is questionable whether original claims 15 to 22, which refer to an unspecified recording medium, find sufficient support in the description (Article 84 EPC).

3.3 Insofar as claim 1 of the main request is directed to a generic computer-readable medium having a menu data structure originally disclosed for a read-only disc, it does not comply, in the Board's opinion, with Article 123(2) EPC.

4. As to the structure of the managing data specified in claim 1, the appellant argued in the statement of grounds of appeal (see section "Art. 123(2) EPC" and point X. above) that it was based on the embodiments illustrated in Figures 3 to 5 and explained from page 4, line 26 to page 7, line 6, of the published application.

4.1 Features (a) and (b) of claim 1 according to the main request (see the Board's itemisation) specify that the data structure for managing data comprises picture data relating to a menu page and menu management information.

The passage of the description cited by the appellant in support of claim 1 describes the managing data structure as follows(see page 4, line 29 to page 5, line 2) :

- the BD-ROM contains menu data for the selection of a title, a chapter or a play item of A/V stream;
- the menu data is composed of many basic menu pages and corresponding management information;
- each basic menu page is a picture;
- each picture combines a background image, menu title, thumbnails, button images to switch a menu page, texts etc..

Thus, as explained in lines 3 to 6 at page 5 of the application, a BD-ROM according to the present invention includes *"not separate menu items but JPEG-encoded basic menu pictures where all necessary menu items have been already included"*.

4.2 The *"menu data structure"* shown in Figures 3 to 6 and described from page 4, line 16 to page 7, line 14 may be summarised as follows:

- JPEG-encoded basic menu pages (or menu pictures) are recorded in the file 'menu.dat' (see Fig. 3);
- group information of basic menu pages is recorded in the file 'Menu.inf' (see Fig. 4);
- the menu management information written in 'Menu.inf' includes information about the number of groups, the number of basic menu pages, size of the JPEG picture etc., and in particular menu group information ('Menu\_Group\_Info()') (see Figure 4));
- the menu group information includes the number of menu pages in a group, index information pointing to each menu page in the menu.dat, information on the menu pictures and 'Menu\_Page\_Info' *"containing detailed information for individual basic menu pages"* (page 6, lines 9 and 10, Figure 4);
- the 'Menu\_Page\_Info' (see Figure 5) for each menu page includes the number of menu items, an item number selected as default ('Default\_selected\_Item\_number'), previous and next menu page numbers and 'Menu\_Item\_Info()';

- the 'Menu\_Item\_Info()' contains detailed information for individual menu items, in particular *"display-state control information named item window information 'Item\_window'..."* (page 6, lines 22 to 24);
- according to the embodiment of Figure 5, the 'Item\_window' contains information, such as colour and time information for holding or blinking highlighted state, for differentiating the display of a particular item;
- according to the embodiment of Figure 6, the 'Item\_window' includes a picture index to point to a JPEG-encoded picture of a menu item *"that has been encoded in highlighted image"* (page 7, lines 10 to 13).

4.3 In the light of the description, there seems to be the following correspondence between the features of claim 1 and the "menu data structure" illustrated in Figures 3 to 6:

- menu management information ('Menu\_Group\_Info'), corresponding to feature (b), includes menu page information ('Menu\_Page\_info') and a number of pages field ('number\_of\_Pages');
- the menu page information according to feature (c), corresponding to 'Menu\_Page\_Info' of Figure 5, includes menu item information ('Menu\_Item\_Info'), a number of menu items field ('number\_of Menu\_Item) and a default selected item number field ('Default\_selected\_Item\_number');

- the menu item information according to feature (d), corresponding to 'Menu\_Item\_Info', includes display-state control information ('Item\_Window') and neighbouring item information ('Neighbor-Items').

4.4 Although the "menu management information" according to claim 1 of the main request is indeed based on items of the "menu data structure" shown in Figures 3 to 5, it does not comprise all the features of the latter. It is, in particular, noted that in the original application "*neighboring information*" is specified for a recording medium according to dependent claim 13 and thus in combination with all the features recited in the higher ranking claims 1, and 10 to 12. On the other hand, some of the features of original claims 1 and 10 to 13 are not recited in claim 1 of the main request.

Furthermore, the appellant has not provided any justification for the inclusion in claim 1 of certain items of the menu data structure of the detailed embodiment which do not appear to provide a direct contribution to the solution of the addressed problem (see application as published, page 3, lines 5 to 11).

4.5 In the Board's opinion, basing an independent claim on what appears to be an "arbitrary" combination of features taken from a preferred embodiment has to be regarded as an intermediate generalisation of that embodiment which cannot be directly and unambiguously derived from the original application (Article 123(2) EPC).

5. Although lack of compliance with Article 123(2) EPC provides sufficient reasons for refusing the appellant's main request, the Board, noting that in the

present case these objections could, in principle, have been overcome, has decided for the sake of completeness to assess the inventive merit of the claimed invention.

Prior art

6. Document D1 relates to *"a method of writing menu data to a high-density recording medium"* (paragraph [0002]). In paragraph [0007], it is specified that, in order to construct a menu screen, a DVD player has to search both video data for background and subpicture data for menu items such as highlighted box, etc. respectively, decode each data, mix them, and re-encode the mixed data to data stream suitable to a digital TV set.

However, such operations have the drawback that very complicated hardware is required for constructing a menu screen (paragraph [0008]).

D1 seeks *"to provide a method of making it possible to present title or chapter menu of a high-density recording medium with a digital television set through writing an additional video data for menu and their management data ..."* (paragraph [0010]).

A recording medium according to D1 includes *"menu data belonging to a plurality of menu pictures, each picture having data contents differentiating each included menu item distinctively from the other menu items"* (paragraph [0011]).

- 6.1 As shown in Figure 4, a high-density recording medium according to document D1 is partitioned into a "file system" area and a "video zone". The "video zone" contains Video Manager (VMG) data and several titles. The VMG data comprises "Navigation Data", "A/V Menu

Data for VMG" and "A/V Menu Data for Title" (embodiment of Figure 5). In the embodiment of Figure 4, the "A/V Menu Data for Title" are part of the "Presentation Data" for each title (see D1, paragraphs [0037] to [0040]).

Figure 6 gives an example of a "single menu page" which consists of six menu items, namely four thumbnails for titles and two "direction icons". Paragraph [0043] specifies that "video menu data" for each different basic menu page are written as "A/V menu data for VMG". It is stated in the same paragraph that each different basic menu page comprises four different thumbnails for different four titles. The A/V menu data for VMG includes also menu management information which is used to generate OSD data necessary for indicating which menu item is selected.

- 6.2 According to the appellant, paragraph [0043] of D1 implies that the "basic menu page" was composed of a "basic picture" and "menu item pictures" sampled from pictures included in a corresponding title. Thus, the "basic menu page" was not provided as a single image, but had to be composed of several menu image data.
- 6.3 It is indeed stated in paragraph [0043] that a thumbnail icon of a title or chapter is sampled from a picture of the corresponding title or chapter. However, this does not mean that the thumbnail is sampled every time it is displayed. On the contrary, in the Board's opinion, the description clearly implies that a basic menu page comprising thumbnails generated on the basis of sampled pictures is stored as part of the A/V menu data for the Video Manager. In fact, there is no indication in document D1 that the graphical representation of a menu page in document D1 is

assembled upon the menu page being assessed (cf. claims 2, 3, 9 and 10 of D1).

- 6.4 Furthermore, it is specified in paragraph [0045] that *"[i]n the case that menu data have been written as aforementioned, if six selected cases for a single menu page (for selecting one among titles 1 to 4) are to be furnished, one basic menu page is read and provided for a digital TV set and mutually different OSD data for differentiating, for example, highlighting a selected menu item are generated on user's selection and related menu management information, and then provided, too"*.

Thus, the six cases for item selection shown in Figure 7 are built up by one basic menu and six different OSD data (paragraph [0046]).

Paragraphs [0048] to [0060] explain in detail how a "menu picture" is actually encoded and, in particular, how a menu picture is *"displayed in still" "without a special operation of a digital television set"* (cf. paragraphs [0055] and [0056]).

- 6.5 In summary, document D1 anticipates the underlying idea of the present invention which consists in storing on the recording medium menu data comprising at least a menu page with different menu items, whereby the item selected is displayed in a highlighted manner (see statement of grounds, page 13, penultimate paragraph and point X. above).

Furthermore, the Board considers that the recording medium according to document D1 constitutes a "computer readable medium" in the sense that a computer provided with a suitable medium player and corresponding



software could be used to read and process the recorded data.

Since the menu pages referred to in document D1 are grouped together into a single high-density stream object ("HOB"), can be singularly addressed and displayed as still pictures and comprise a plurality of selectable menu items, it is reasonable to assume that the VMG data according to the teaching of document D1 necessarily implies menu management information and menu page information as specified in features (b) and (c) of claim 1. In any case, the Board considers that it would be obvious to a skilled person wishing to implement a recording medium having menu data offering the functionalities described in D1 to provide the recording medium with VMG data as specified in features (b) and (c).

As to feature (d), the Board considers that OSD data which highlights a selected menu item on a menu page (cf. paragraph [0032]) displays the highlighted menu differently from the others and thus can be regarded as "display-state control information" according to feature (d)(i) of claim 1.

As to feature (d)(ii), the Board notes that according to document D1 a menu page consists of six menu items, namely four thumbnails for titles and two directions icons (see Figure 6). As it is to be assumed that a user may switch a selection from one menu item to a neighbouring item, the VMG data according to D1 necessarily includes neighbouring information as specified in claim 1.

Finally, the Board concurs with the Examining Division (see contested decision, page 13, point 2.6,

sub-paragraph 7) that providing a default selection of a menu item at the initial display of a menu page is a standard feature generally known in the art (see feature (c)(ii)).

7. Claim 1 does not specify any encoding format for the "picture data", although the description refers to JPEG-encoded basic menu pages (see Figure 4 of the application). As pointed out above, in D1 the menu data is encoded as video data with the MPEG II standard but displayed as still picture (paragraph [0030] of D1).
- 7.1 If it is assumed that the term "*picture data*" cannot cover a video data format, but necessarily implies a photo data format, such as JPEG, feature (a) may distinguish the claimed invention from the prior art. However, in the Board's opinion, this feature would not make the subject-matter of claim 1 inventive over the method disclosed in document D1.
- 7.2 In fact, the essential aspect of the present invention, which consists in representing a menu page comprising a plurality of menu items by means of a pre-recorded image is known from document D1. It is obvious to a person skilled in the art that this teaching is independent of the format of the picture data and can, in principle, be applied to any suitable encoding scheme. In the Board's opinion, no surprising effect is to be expected by encoding the representation of a menu page as "picture data".
8. In summary, the Board considers that the subject-matter of claim 1 according to the main request does not involve an inventive step within the meaning of Article 56 EPC.

First auxiliary request

9. Claim 1 according to the first auxiliary request reads as follows, whereby additions to claim 1 of the main request are highlighted in italics and deletions shown by strikethrough:

A computer readable medium having a data structure for managing data, *the data structure* comprising:

- (a) a picture data ~~which is formed of an image of~~ comprising at least one a menu page picture, whereby the menu page picture represents being a menu page ~~for providing selection options selecting a reproducible for reproducing~~ data recorded on the recording medium; and
- (b) a menu management information including:
  - (i) a menu page information for managing the menu page; and
  - (ii) a number of pages *information field* indicating the number of menu pages managed by the menu management information,
- (c) the menu page information including:
  - (i) a menu item information for managing a menu item, whereby the menu item ~~being an object contributing to the~~ forms part of the menu page picture;
  - (ii) a default selected item number *field information* indicating a menu item which is selected by default at initial display of the menu page; and
  - (iii) a number of menu items *information field* indicating the number of menu items contained in the menu page,characterized in that
- (d) the menu item information includes:

- (i) a display-state control information including information related to the display of the menu item within the menu page *in the selected state* and ~~which is used to display one menu item differently from others in the menu page,~~ and
- (ii) neighboring item information indicating neighbor menu item displayed adjacent to the menu item.

9.2 A comparison between the two claim wordings leaves no doubt that claim 1 of the first auxiliary request and claim 1 according to the main request relate essentially to the same subject-matter and the objections under Article 123(2) and Article 56 EPC raised above against the latter remain valid for the former.

#### Supplemental requests

10. The appellant's "Supplemental requests" (see point 5 of the statements of grounds and point V above) concern the replacement of the term "recording medium" with the term "computer readable medium" or with "an acceptable term" in claim 1 according to the main request or to the first auxiliary request.

10.1 Apart from the fact that the Board must disregard substantive requests that do not clearly define the text which should form the basis for the grant of a patent (Article 113(2) EPC), none of the amendments according to the appellant's "supplemental requests" addresses the Board's objections against the main request.

11. In the result, the Board comes to the conclusion that none of the appellant's requests can form the basis for the grant of a patent. Consequently, the appeal has to be dismissed.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated