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Datasheet for the decision of 23 November 2006

Case Number: T 0985/01 - 3.5.04

Application Number: 91119632.7

Publication Number: 0486987

IPC: H04N 5/445

Language of the proceedings: EN

Title of invention:
Television image visualising device

Patentee:
EDICO S.r.l

Former opponents:
Koninklijke Philips Electronics N.V.
IGR GmbH & Co. KG

Headword:
-

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step - (yes) after amendment"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0985/01 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 23 November 2006

Appellant: (Patent Proprietor)	EDICO S.r.l. Via Atanasio Kircher, 7 I-00197 Roma (IT)
Representative:	Eisenführ, Speiser & Partner Patentanwälte Rechtsanwälte Postfach 10 60 78 D-28060 Bremen (DE)
Former Respondents: (Opponent 1)	Koninklijke Philips Electronics N.V. Groenewoudseweg 1 NL-5621 BA Eindhoven (NL)
Representative:	Schmitz, Herman Jan Renier Philips Intellectual Property & Standards P.O. Box 220 NL-5600 AE Eindhoven (NL)
(Opponent 2)	IGR GmbH & Co. KG. Bahnstraße 62 D-40210 Düsseldorf (DE)
Representative:	Eichstädt, Alfred Maryniok & Eichstädt Kuhbergstraße 23 D-96317 Kronach (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted 25 June 2001 revoking European patent No. 0486987 pursuant to Article 102(1) EPC.**

Composition of the Board:

Chairman: F. Edlinger
Members: C. Kunzelmann
B. Müller

Summary of Facts and Submissions

I. The appeal filed by the patent proprietor is against the decision of the opposition division revoking European patent No. 0 486 987. The opposition division was of the opinion that the ground for opposition raised by the two opponents, namely lack of inventive step, prejudiced the maintenance of the patent.

II. This case was originally allocated, following the business distribution scheme, to a different technical board of appeal.

III. Respondent 1 withdrew its opposition in a letter dated 9 July 2003.

IV. In a decision dated 18 March 2005 also designated T 985/01, an objection of suspected partiality against the chairman of the original board was refused. Subsequent to an amendment of the business distribution scheme, the case was transferred to the present board.

V. With the summons to attend oral proceedings the board sent a communication pursuant to Article 11(1) RPBA in which it indicated that it might agree with the arguments put forward by the opposition division.

VI. Respondent 2 withdrew its opposition in a letter dated 10 November 2006.

VII. In oral proceedings held on 23 November 2006 before the board, the appellant submitted a complete set of new patent documents consisting of columns 1 to 6 of the description, claims 1 to 7, and figures 1 to 4.

VIII. Independent claims 1 and 5 read as follows:

Claim 1:

"Method for selecting a television program and activating the reception and visualisation thereof on a screen (S) of a television picture visualising device, characterized in combination by the following steps:

- visualising on said screen several pictures of reduced dimensions of corresponding television programs, memorised in a memory and displayed in a matrix according to a plurality of rows and columns;
- visualising on said screen a cursor (F), superimposed on one of said pictures *whereby said cursor (F) is generated by a character generator*;
- providing command means (K) for moving said cursor (F), from one of the pictures to anyone of the neighbouring ones, by acting on one or more keys of said command means;
- providing further means (17) for identifying among said several television pictures the selected picture in which the cursor (F) is positioned*, interrogating the state of said character generator, and* calculating from the number of rows and columns, relative to the cursor (F), the corresponding cell of a tuning memory where tuning data are stored corresponding to the selected picture;
- supplying said tuning data to a tuner (A) for tuning into said program indicated by the cursor (F); and

- visualising a full screen picture corresponding to the television signal coming from said tuner (A)."

Claim 5:

"Television picture visualising device for selecting a television program and activating the reception and visualisation thereof on a screen (S), characterized by comprising in combination:

- means for visualising on said screen several pictures of reduced dimensions of corresponding television programs, memorised in a memory and displayed in a matrix according to a plurality of rows and columns;
- means for visualising on said screen a cursor (F), superimposed on one of said pictures *whereby said cursor (F) is generated by a character generator*;
- command means (K) for moving said cursor (F) from one of the pictures to anyone of the neighbouring ones, by acting on one or more keys of said command means (K);
- further means (17) for identifying among said several television pictures the selected picture in which the cursor (F) is positioned, *interrogating the state of said character generator, and* calculating from the number of rows and columns, relative to the cursor (F), the corresponding cell of a tuning memory where tuning data are stored corresponding to the selected picture;
- means for supplying said tuning data to a tuner (A) for tuning into said program indicated by the cursor (F); and

- means for visualising a full screen picture corresponding to the television signal coming from said tuner (A)."

[The amendments made in appeal proceedings to the independent claims on which the decision under appeal was based are indicated in italics.]

Claims 2 to 4 and 6 and 7 are dependent claims.

IX. The reasoning in the decision under appeal referred to the documents

D1: DE 36 40 129 A1

D2: EP 0 355 172 A1

D4: EP 0 267 020 A2

and can be summarised as follows:

Both D1 and D2 (column 7, lines 9 to 18) disclosed a method for selecting a television program from a plurality of television programs simultaneously visualised in reduced size on a screen, and for displaying the selected program as a full screen picture.

D1 disclosed all the features of claim 1 of the opposed patent except the ones relating to the visualising on the screen of a cursor, superimposed on one of said pictures, and to command means for moving the cursor. In D1 the number of keys corresponded to the number of displayed pictures. Considering D1 as the nearest prior

art, there was a problem of key proliferation when the number of channels increased. D2 disclosed the well-established cursor-based approach to solving this problem.

D2 disclosed all the features of claim 1 of the opposed patent except the ones of a memory storing the reduced size pictures and the display of a matrix according to a plurality of rows and columns. Considering D2 as the nearest prior art, the use of memory means to store the reduced size pictures was well-known in the art or at least disclosed in D1 or D4. The display of rows and columns on the screen was indicated in figures 1 and 3 of D2. The necessary tuning data of the selected program could be derived from common general knowledge or from D1 or D4. It was obvious to use the cursor/key implementation described in embodiments of D2 in the multiple picture display mode of column 7.

X. The arguments made by the appellant (patent proprietor) may be summarised as follows:

According to D1 a program was selected by operating one of the selection keys on a remote control, the keys corresponding in number and arrangement to those of the small pictures on the screen. D1 neither disclosed nor required a cursor.

In D2 the paragraph dealing with channel switching (column 7, lines 9 to 18) disclosed pictures (program fields) generated by a character generator in a menu mode. No cursor was used in this variant.

In the embodiments of figures 3 and 4 of D2 the remote control was like a camera that had to point towards a particular menu field on the screen to cause a cursor to be displayed on this field. The position of the particular menu field was determined from the vertical and horizontal phase of the signal causing the display of the field. This cursor control functioned only with the small number of menu fields disclosed in D2.

The embodiments of D2 having cursor control using keys had a small number of menu fields. The cursor was caused to jump from one menu field to the next by pressing one key or two keys. The cursor's position relative to its home position could be determined from the order in which the keys were pressed.

In the invention the cursor position was determined in a simple manner by interrogating the state of the character generator producing the cursor. This position determined the selected picture and also the corresponding memory cell because there was a known mapping of the picture positions in the matrix to the memory cells. The cursor path was irrelevant so that the invention could also be used with a large number of pictures.

XI. The appellant requests that the decision under appeal be set aside and that the patent be maintained on the basis of the patent documents filed in the oral proceedings of 23 November 2006.

Reasons for the Decision

1. The appeal is admissible.

2. *Amendments (Article 123(2) and (3) EPC)*

The two features inserted into claims 1 and 5 in appeal proceedings are respectively disclosed in paragraphs [0032] and [0044] of the patent specification and in the corresponding passages of the application as filed. These two features in the context of claims 1 and 5 specify that the picture on which the cursor is superimposed is identified by interrogating the state of the character generator which generates the cursor. The cell of the tuning memory containing data corresponding to the selected picture is calculated on the basis of the cursor's and hence the selected picture's position in the matrix of rows and columns. The board construes this as meaning that the corresponding cell is determined by calculating an identification parameter (such as the number of the cell).

Since the two features were disclosed in the application as filed and have limiting character, the board is satisfied that the amendments made to the patent do not infringe Article 123(2) and (3) EPC.

3. *Inventive step (Articles 100(a) and 56 EPC)*

3.1 Document D1

It is undisputed that D1 discloses selecting a television program and activating the reception and

visualisation thereof on a television screen (see figure 2 and column 8, line 66 to column 9, line 21). D1 does not disclose interrogating the state of a character generator generating a cursor, for determining a memory cell where tuning data are stored corresponding to a picture in which the cursor is positioned. Instead D1 indicates that the use of a command means having a matrix of keys corresponding to the matrix of pictures for determining the memory cell makes the selection simple (column 9, lines 8 to 14). Thus D1 alone does not suggest the method of claim 1 of the opposed patent.

3.2 Document D2

3.2.1 D2 discloses displaying on a screen several pictures of reduced dimensions (menu fields f1 - f3; f4 and f5) and a cursor, both of which may be generated by a character generator (column 4, lines 50 to 53 and column 5, lines 24 to 27). In one embodiment (figure 1 and column 3, lines 27 to 42) command means are provided for moving the cursor from one of the pictures to a neighbouring one, by acting on one or more keys of said command means (menu key mt or direction keys). In the other embodiments (figures 2 to 4) the position of an infrared-emitting signal source (sr) with respect to an optical axis (oa) is determined by one or more sensing elements and evaluated to determine the menu field pointed at by a remote control. In the embodiment of figures 3 and 4, one sensing element causes the remote control to produce an infrared signal (ir) corresponding to the menu field pointed at, the signal containing the characteristic sweep frequencies and being received by a television picture visualising

device. A coincidence detector determines the phases of the received signal with respect to the horizontal and vertical sweep (D2, column 6, lines 3 to 31). Thus the menu field pointed at is determined and the cursor is moved to this menu field.

3.2.2 D2 does not disclose a key moved cursor superimposed on one of the pictures of corresponding television programs, memorised in a memory and displayed in a matrix according to a plurality of rows and columns. There is neither a disclosure of nor an apparent need to interrogate the state of the character generator for detecting the cursor's position when it is moved by acting on keys, nor of calculating from the number of rows and columns relative to the cursor (F) positioned in the selected picture the cell of a tuning memory where tuning data are stored corresponding to this picture.

3.2.3 The passage in D2 (column 7, lines 9 to 18) referred to in the decision under appeal does not unambiguously disclose the selection of a television channel employing a multi-picture display of television programs. D2 discloses no details supporting such an interpretation. Rather this passage, understood in context (D2, column 6, line 52 to column 7, line 18), refers to channel selection in the menu mode and specifies that the "program fields" are menu fields. D2 highlights in this context that the use of the remote control of figures 2 to 4 is very user friendly. Thus D2 alone does not suggest the method of claim 1 of the opposed patent, either.

3.3 Document D4

D4 discloses a television channel selection apparatus employing a multi-picture display. In multi-picture operation a miniature display picture corresponding to a currently selected channel appears as a moving picture, while miniature display pictures corresponding to the other channels appear as static pictures, with each channel being sequentially selected during a fixed time interval. By actuating a switch the user terminates the multi-picture display mode, returns to normal operation and so produces a continuous full-scale display of the currently selected channel (D4, column 11, lines 29 to 49). There is thus no need for superimposing a cursor and determining its position in D4.

3.4 None of the above documents, nor any other available document, discloses interrogating the state of a character generator generating a cursor, for determining a memory cell where tuning data are stored corresponding to a picture in which the cursor is positioned. Instead documents D1, D2 and D4 each suggest different methods for selecting a picture from a plurality of pictures visualised on a screen which all lead away from the method specified in claim 1 of the opposed patent. Therefore having regard to the available state of the art, the method of claim 1 of the opposed patent was not obvious to a person skilled in the art.

3.5 Claim 5 of the opposed patent specifies a television picture visualising device comprising functional apparatus features corresponding to the steps of

claim 1. Hence the device of claim 5 was not obvious to a person skilled in the art either.

4. The board therefore judges that, taking into consideration the amendments made by the proprietor of the patent, the patent and the invention to which it relates meet the requirements of the Convention (Article 102(3) EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to maintain the patent as amended in the version received during the oral proceedings of 23 November 2006.

The Registrar: The Chairman:

D. Sauter F. Edlinger