Datasheet for the decision of 4 June 2013

Case Number: T 1300/09 - 3.5.04
Application Number: 03764065.3
Publication Number: 1525743
IPC: H04N5/00
Language of the proceedings: EN

Title of invention:
RECEIVER WITH CONCURRENT MULTI-USER ELECTRONIC PROGRAM GUIDE

Applicant:
Pace Plc

Headword:

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - after amendment

Decisions cited:

Catchword:
Case Number: T 1300/09 - 3.5.04

DECISION
of Technical Board of Appeal 3.5.04
of 4 June 2013

Appellant: Pace Plc
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 27 January 2009 refusing European patent application No. 03764065.3 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: F. Edlinger
Members: R. Gerdes
B. Müller
Summary of Facts and Submissions

I. The appeal is directed against the decision to refuse European patent application No. 03 764 065.3, published as international application WO 2004/008739 A1.

II. The patent application was refused by the examining division on the grounds that the subject-matter of claims 1 to 9 of the main request and of the first auxiliary request did not involve an inventive step (Article 56 EPC) in view of documents

D2: EP 0 952 734 A2 and

III. The applicant appealed against this decision and with the statement of grounds of appeal submitted claims of a new main request and of a new auxiliary request, as well as amended pages of the description.

IV. In a communication annexed to the summons to oral proceedings the board indicated its preliminary opinion with respect to these requests.

V. With a letter of 3 May 2013 the appellant submitted amended claims 1 to 3 of a new main request and a new auxiliary request, respectively.

VI. Oral proceedings were held before the board on 4 June 2013. The appellant made amendments to the documents of the main request which had been filed with letter of 3 May 2013 and made the amended main request his sole request. The appellant requested that the decision under appeal be set aside and that a patent be granted in the following version:
Description:
Pages 1 and 4 to 6 as published
Pages 2 and 2bis submitted in the oral proceedings
Page 3 filed with entry into the regional phase

Claims:
No. 1 to 3 submitted in the oral proceedings

Drawings:
Sheet 1/1 as published.

VII. Claims 1 to 3 of the sole request read as follows:

"1 Home entertainment system (11-15) comprising i) a receiver (STB) for receiving programs from a transmission system, ii) a plurality of remote devices (13-15) comprising input and output means for accessing an electronic program guide (EPG) containing information on a plurality of program channels, iii) an electronic program guide means for browsing through said electronic program guide (EPG), wherein said electronic program guide means comprises:
- a server module (EPG SERV) with a concurrent multi-users support, and
- a plurality of client modules (EPG CLIENT),
wherein the receiver (STB) comprises the server module and the client modules are comprised in the receiver (STB),
wherein the plurality of client modules (EPG CLIENT) are respectively assigned to said remote devices (13-15) and intended for initiating communication with said server module (EPG SERV) to retrieve electronic program guide information for their respective assigned remote devices, and wherein said server module (EPG SERV) is arranged, upon request of one of said remote devices (13-15), for accessing to information of said electronic program guide (EPG) and, for managing the navigation of the client module
(EPG CLIENT) assigned to said requesting remote device within the electronic program guide information, so that several users using remote devices can concurrently browse the EPG from their respective remote devices, without disturbing each other and for each said remote device, the appropriate EPG information is accessed in response to the request made via that remote device and a display representing said appropriate EPG information is generated and the respective display for each remote device is viewable by the user of that remote device via a display means of the remote device, or a television screen if the remote device is a remote control.

2 Method of remotely browsing, in a transmission system, through an electronic program guide (EPG) containing information on a plurality of program channels transmitted from a transmission system via a receiver (STB) connected to at least two remote devices (13-15), using an electronic program guide means for browsing through said electronic program guide (EPG), wherein it comprises:

i) providing electronic program guide means with a server module (EPG SERV) having a concurrent multi-users support,

ii) providing the electronic program guide means with a plurality of client modules (EPG CLIENT), respectively assigned to said remote devices (13-15) and intended for initiating communication with said server module (EPG SERV) to retrieve electronic program guide information for their respective assigned remote devices (13-15), wherein the server module (EPG SERV) and the plurality of client modules (EPG CLIENT) are comprised in the receiver (STB), and
iii) each time one of said remote devices (13-15) requests to access electronic program guide information, using the client module (EPG CLIENT) assigned to this requesting remote device to transmit said request to said server module (EPG SERV) for managing the navigation of this client module within the electronic program guide information, so that several users using remote devices can access the EPG from their respective remote devices at the same time, without disturbing each other and for each said remote device, the appropriate EPG information is accessed in response to the request made via that remote device and a display representing said appropriate EPG information is generated, and the respective display for each remote device is viewable by the user of that remote device via a display means of the remote device, or a television screen if the remote device is a remote control.

3 Computer program product for a receiver (STB) executing a set of instructions, when loaded into the receiver (STB), to cause the receiver (STB) to carry out the method as claimed in the claim 2."

VIII. The examining division held in the decision under appeal that D2 constituted the closest prior art with respect to the claimed subject-matter. In particular, D2 disclosed a receiver comprising an electronic program guide means used for browsing through an electronic program guide (EPG) containing information on a plurality of channels (paragraphs [0027] and [0029], figure 2). The division found that the sending of "a message from the TCD processor via the transmitter to the TV instructing the TV selector to send particular content to it" was client module
functionality (see decision under appeal, point 3.4). Similarly, the TV selector 104 provided server functionality and the server module was arranged to manage the navigation of the client modules within the EPG (D2, paragraphs [0022], [0026], [0032], [0036], [0037] and decision under appeal, point 1.5).

D2 did not disclose that the remote devices initiated communication with the server module, which provided the technical effect that a remote device could request information in a "pull" manner (see points 1.5.1 to 1.5.6 of the decision under appeal). D3 disclosed an interactive entertainment guide system comprising a remote device that transmitted a request signal to a set-top box in order "to register its requirement for information with the server module". The skilled person would have combined the teachings of D2 with D3 to arrive at the subject-matter of claim 1 then on file.

IX. The appellant argued that D2 addressed the technical problem of how to direct specific streams to remote user devices. This problem was different from the problem underlying the present invention, which was to "allow a plurality of users to access a program guide without disturbing each other" (see page 2 of the present application, lines 3 to 5). D2 did not disclose displaying an EPG. Instead, menus were provided to allow users of remote devices to select from a number of information streams that were currently received by the television system. Hence, D2 did not disclose display and navigation in an EPG. Nor did it disclose a client/server system with clients being arranged on the receiver and a remote control interacting with the server via a client. The objective technical problem addressed by the present application could therefore be seen as how to allow EPG information to be optimally
viewed by a number of different users. The solution to the problem consisting in an EPG architecture comprising server and client modules in the receiver (STB) made it possible that the EPG information was provided in different dedicated formats corresponding to each different remote device. This EPG architecture was not rendered obvious by the prior art.

Reasons for the Decision

1. The appeal is admissible.

2. Amendments, Article 123(2) EPC

2.1 Present claim 1 was derived from claim 5 underlying the decision under appeal. Apart from corrections of obvious mistakes and the elimination of the two-part form, the phrase "and/or in the plurality of remote devices (13-15)" was deleted. This deletion restricts the scope of the claim to one of two options. Furthermore, the wording "such that several users using remote devices can access the EPG from their respective remote devices at the same time" was replaced by "so that several users using remote devices can concurrently browse the EPG from their respective remote devices". The passage on page 3, lines 5 to 14 of the application as originally filed can serve as a basis for this amendment.

Present claim 1 is additionally distinguished from claim 5 underlying the decision under appeal in that the following feature was added to the claim:
"... and for each said remote device, the appropriate EPG information is accessed in response to the request made via that remote device and a display representing said appropriate EPG information is generated and the respective display for each remote device is viewable by the user of that remote device via a display means of the remote device, or a television screen if the remote device is a remote control."

This amendment is based on page 5, lines 3 to 11, and page 3, line 32 to page 4, line 4.

2.2 Similar amendments have been made to claim 2, which was derived from claim 8 underlying the decision under appeal. Hence, the board finds that the claims of the appellant's sole request do not contain subject-matter which extends beyond the content of the application as filed and that they thus comply with Article 123(2) EPC.

3. Inventive Step (Article 56 EPC 1973)

3.1 The board shares the view of the appellant and the examining division that D2 may be considered as the closest prior art with respect to the subject-matter of claim 1.

3.1.1 D2 discloses a home entertainment system comprising a receiver (communication transceiver, figure 1: TV 100) receiving programs from a transmission system (via a broadcast signal). The system comprises a plurality of remote devices (television companion devices, TCDs 120) for accessing information streams separated from the broadcast signal. The provision of an information display on each TCD allows for the selection and "the personal viewing of information selected specifically
for the individual". Such personalised information
displayed on each TCD may be "parts and subparts
(segments) of information streams", such as "video
clips or video programs, audio clips or audio programs,
data, graphical images, still images, and/or
animations" (abstract and paragraphs [0016], [0019],
[0020], [0036]).

A TV processor 112 located in the receiver generates
menus for display to the users. The menu items can be
selected by the user "for output on either the TV 100
or the TCD 120" (figures 2 and 3, paragraph [0027]).
The menus generated by the TV processor relate to the
streams currently being broadcast and received by the
receiver. These streams are searched for "important
information such as the title of a video segment",
"categories 615, types 620, and/or keywords and
keyphrases 630" so as to allow for automatic or manual
selection of streams of interest for the individual
user (see paragraphs [0021], [0027], [0045]
and [0047]).

Streams are selected using an input interface to the
TCD such as a menu pointer or a keyboard. Stream
selection may be effected directly on the TCD or
indirectly by transmitting a message from the TCD to
the receiver so as to instruct the TV selector 104 to
select a particular stream for output via the TCD
(paragraph [0036]).

3.1.2 D2 does not explicitly disclose the display of an
"electronic program guide (EPG) containing information
on a plurality of program channels". The board does not
share the view of the examining division that a menu
displaying currently broadcast information streams for
selection by users via a remote device can be equated
with an EPG as specified in claim 1. This program guide means contains information on a plurality of program channels and is suitable for retrieving information of the EPG allowing interactive access to, and navigation within, EPG information as specified in claim 1. Usually an EPG provides an on-screen listing of all programming for given time slots (see e.g. D3, page 2, lines 4 to 7 and lines 20 to 22). Contrary thereto, the menus disclosed in D2 only allow for the display of currently transmitted streams, i.e. they do not allow for navigating EPG information by date and time. Since D2 discloses a TV processor and refers to digital television where associated data are usually transmitted simultaneously with a television program (see for instance D2, paragraph [0010]), a user of a remote device could select one of these programs and access EPG information. But D2 is completely silent on how EPG information would be accessed.

3.1.3 Moreover, D2 does not provide details with respect to the interaction of the remote devices (TCDs 120) and the communication receiver (TV 100). In particular, it does not show a client-server architecture with client and server modules located in the receiver, the server accessing information from the EPG at the request of one of the remote devices and managing the navigation, within the EPG information, of the client module assigned to the requesting remote device (see for instance page 3, line 32 to page 4, line 4 and page 5, lines 1 to 2).

The examining division deemed these features to be disclosed in D2, paragraphs [0019], [0022], [0026], [0032], [0036], [0037]. However, even if the processors and selectors on the receiver and the remote devices were considered as a client/server system due to their
functionality, these passages only disclose that selected information streams are passed through from the receiver to the remote devices in response to a request by the remote devices. In contrast to such mere switching of information streams, the navigation within the EPG managed by the server in response to a request requires that the EPG information is analysed in the server and that a part of the EPG information is forwarded on request to the remote device with the server keeping track of the requests. Moreover, this client/server architecture provides more flexibility in coupling new remote devices to the receiver (see page 5, line 18 to page 6, line 6 and figure 1 of the application).

3.1.4 Claim 1 further requires a client assigned to a remote control, the client interacting with the server that also manages navigation for that client in the EPG. D2 neither discloses this feature nor that EPG information being requested via the remote control is displayed on the television screen.

3.1.5 As acknowledged in the decision under appeal (see point 1.5.1 of the decision), D2 does not disclose that the remote devices initiate communication with the server module.

3.2 The technical effect provided by the distinguishing feature of point 3.1.2 is that EPG information is made available for navigation to a plurality of users using remote devices and a single receiver/television. The further distinguishing features (points 3.1.3 and 3.1.5 above) relate to an implementation allowing more flexibility for access by different devices. These features also allow for the use of a conventional remote control as part of the home entertainment system
(point 3.1.4 above) and to "request information in a 'pull' manner" (for the latter technical effect, see decision under appeal, point 1.5.3).

3.3 The board essentially accepts the appellant's view that the technical problem resulting from these effects may be considered as how to allow EPG information to be (optimally) viewed by a number of different user devices (at the same time if required; see statement of grounds of appeal, point 7; see also page 2, lines 13 to 15 of the description).

3.4 The use of EPGs in home entertainment systems was well known in the art at the priority date of the application (see, for example, D3, figure 2). D2 also discloses encoding of information streams "as specified in the MPEG-2 specification" (see paragraph [0020]).

However, the board finds that, starting from D2, the skilled person would not have arrived in an obvious manner at the implementation specified in claim 1. As set out above (see point 3.1.2), the receiver/television of D2 passes selected streams to remote devices. D2 is not concerned with either access to, and navigation within, EPG information, which is usually provided as metadata, or the forwarding of parts of the information on request. In D2 the receiver rather acts only as a separator and switch for the different streams and substreams. Moreover, D2 does not suggest a software architecture enabling interaction both with remote devices having a display and with a conventional remote control. This flexibility is at least partly achieved by using the client/server architecture for both types of remote device (remote device with local display and remote control without display), with clients and server being located on the receiver.
3.5 D3 discloses an advanced remote control having a display for communicating with an interactive television system. Communication may be initiated from the remote control in a pull manner. D3 also discloses the display of EPG data on the display of the remote control. However, D3 does not disclose a client/server architecture with both server and client being located on the receiver and enabling on the one hand to interact with remote devices having a display and on the other hand with a conventional remote control. Nor does it disclose that navigation within the EPG is managed by the server in response to a request of the client. Hence, when combining the teaching of D2 and D3, the skilled person would not have arrived at the claimed subject-matter.

3.6 As a result, the subject-matter of claim 1 would not have been obvious to a person skilled in the art in view of the cited documents and therefore involves an inventive step (Article 56 EPC 1973).

3.7 Claims 2 and 3 relate to a corresponding method for remotely browsing through an EPG and a corresponding computer program product for a receiver. Thus, the subject-matter of these claims also involves an inventive step.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to grant a patent in the following version:

   Description:
   Pages 1 and 4 to 6 as published
   Pages 2 and 2bis submitted in the oral proceedings
   Page 3 filed with entry into the regional phase

   Claims:
   No. 1 to 3 submitted in the oral proceedings

   Drawings:
   Sheet 1/1 as published.

The Registrar:                                                  The Chairman:

K. Boelicke                                                  F. Edlinger

Decision electronically authenticated