Datasheet for the decision
of 19 June 2008

Case Number: T 0861/04 - 3.5.04
Application Number: 95943590.0
Publication Number: 0806112
IPC: H04N 5/445
Language of the proceedings: EN

Title of invention:
Electronic television program guide schedule system and method
with display and search of program with alphabetical title
listings

Patentee:
United Video Properties, Inc.

Opponent:
BetaResearch GmbH

Headword:
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Relevant legal provisions:
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Relevant legal provisions (EPC 1973):
EPC Art. 54(2), 56, 100(c)

Keyword:
"Inventive step (yes)"
"Extension of subject-matter (no)"

Decisions cited:
T 0511/02, T 0055/01
Catchword:
"The facts stated in a notice of copyright are presumed to be correct unless the contrary is proved (point 2.5 of the reasons)"
Appellant: United Video Properties, Inc.  
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 14 May 2004 revoking European patent No. 0806112 pursuant to Article 102(1) EPC.
Summary of Facts and Submissions

I. The appeal is directed against the decision by the opposition decision to revoke European patent No. 0 806 112.

II. The opposition was filed based on the grounds under Article 100(a) EPC 1973 (lack of inventive step) and Article 100(c) EPC 1973 (extension of subject-matter in dependent claims 11 to 16).

III. The following documents were cited in the opposition proceedings:

E1: US 5 353 121 A;
E2: US 5 241 671 A;
E3: EP 0 391 656 A2;

IV. The opposition division revoked the patent for the reason that the subject-matter of claim 1 according to the various requests then on file lacked an inventive step.

V. The patentee filed an appeal and argued in the statement of grounds of appeal that E1 to E4 did not prejudice the maintenance of the patent as granted.

VI. In the written reply the respondent (opponent) presented counterarguments and requested that the patent be revoked in its entirety.
VII. With a letter dated 15 April 2008, in reply to the summons to oral proceedings issued by the board, the appellant contested the public availability of E4 and requested that the board exercise the power within the competence of the department of first instance to also decide on the question of added subject-matter, which had not been decided upon by the opposition division.

VIII. With a letter dated 26 May 2008 the respondent (opponent) announced that he would not attend the oral proceedings which took place on 19 June 2008 in his absence.

IX. During the oral proceedings the appellant (patentee) withdrew all previous requests and made auxiliary request II, filed with letter dated 15 April 2008, his sole request. He requested that the decision under appeal be set aside and that the patent be maintained on the basis of claims 1 to 14 of the sole request and a description to be adapted.

X. Claim 1 reads as follows.

"Apparatus for connection to a television receiver for providing an electronic television program guide to be displayed by said receiver, said apparatus comprising:
means (12, 13, 15, 18) for receiving program schedule information for a plurality of television programs to appear on a plurality of user-selectable television channels;
wireless remote control means (31,40) having a plurality of keys (36,42) for issuing of commands;
a memory (18) in which program guide application software is resident;
data processing means (16) controlled by the program
guide application software and responsive to commands
from the remote control means to retrieve a selected
portion of the program schedule information and to
generate instructions for display of said selected
portion; and

a video display generator (24) responsive to the
instructions from the data processing means to generate
a display of said selected portion of the program
schedule information;

wherein the program guide application software includes
instructions that in a mode of operation of said guide:
(a) permit a user to search by program title;
(b) permit the user to input the or each of the first n
characters of the title to be searched using
directional keys (37A, 37B, 43A, 43B) of said remote
control means, n being equal to or greater than one;
and

(c) cause the video display generator (24) to provide
an alphabetically-arranged visual display of at [sic]
television program titles on said television receiver,
said display including the title that is the closest
match to those characters;

and wherein the program guide application software
includes instructions that in said mode of operation of
said guide permits the or each character to be selected
with the wireless remote control by cycling through
displayed alphanumeric characters, and causes the video
display to change the display of television program
titles in real time as the or each alphanumeric
character is cycled through with the wireless remote
control."
XI. The reasoning in the decision under appeal may be summarised as follows.

E1 constitutes the closest prior art and discloses the features of the first part of claim 1. It further discloses a mode of operation permitting the user to select program titles according to particular topics or having particular qualifiers. E1 therefore already provides a limited search capability but does not disclose a program guide application software with a direct search for titles according to the second part of claim 1 (features (a) to (c) up to the end of claim 1). The distinguishing features solve two independent technical problems.

The first objective technical problem can be defined as implementing an alphanumeric search facility in a television program guide system in a simple and commercially realisable way. The person skilled in the art would consider the suggestions given in E2 to find an appropriate solution. E2 relates to computer-based systems for searching the content of a database by textual or graphical methods, for instance using the title as a criterion ("Title finder"). In particular a first searching mode permits the user to select a desired title by entering its first alphanumeric characters with a computer keyboard and a third searching mode permits the user to click a letter tab representing the first letter of the title he wishes to search. The system then provides an alphabetical list of the titles that are the closest match to the typed characters or the first letter.
The person skilled in the art would then, after having combined the teachings of E1 and E2, be confronted with the second technical problem consisting in finding an alternative to the input means (computer keyboard and mouse) used in E2 for entering alphanumeric characters. The skilled person would, as a matter of normal design choice, replace them with other input means known in the field of television, in particular those known from E4 which suggests entering characters using the directional (up/down) keys of a remote control.

Then changing the display of television program titles in real time according to the last paragraph of claim 1 is derivable in an obvious way from E2, which provides for an immediate feedback to user inputs in a third searching mode.

XII. The respondent (opponent) in reply to the statement of grounds of appeal submitted further arguments regarding a lack of an inventive step of the subject-matter of claim 1 as granted. In so far as these arguments are relevant for the subject-matter of present claim 1 and go beyond the reasons given in the decision under appeal, they may be summarised as follows.

E1 explicitly compares the user interface of a television set to that of a computer in terms of the amount of information that can be displayed. It relates to advanced technology in which the "person" skilled in the art should be understood as a team of persons, including persons skilled in the art of television and persons skilled in the art of computer programming.
E4 relates to a user manual from a major manufacturer (Sony), which television sets may be presumed to have been sold in great numbers worldwide, so that its content must have been known to the skilled person in 1993, i.e. at least eleven months before the priority date of the present application, as an advantageous alternative to input devices known from E3.

XIII. The relevant argumentation by the appellant as regards inventive step may be summarised as follows.

In view of decision T 511/02 (in particular point 6.1 of the reasons), which had come to the appellant's attention in the meantime, there was considerable doubt as to the public availability of E4. The board considered in this decision that fitting instructions and instructions for use and installation were normally distributed with the corresponding product, so that the mere statement of a printing date on the document was not sufficient to establish a publication date. The considerations apply mutatis mutandis to the copyright notice ("©1993") printed on the user manual E4, so that the respondent has not proved its availability to the public at the priority date of the patent in suit. E4 should therefore be disregarded for the assessment of inventive step. Furthermore E4 relates to a particular make and model of television and cannot be regarded as evidence for common general knowledge.

The persons skilled in the art in the technical fields of E2 (computers) on the one hand and E1 and E4 (television) on the other hand are distinct.
The first technical problem formulated by the opposition division impermissibly contains a pointer to a feature of the solution, namely that the search should be alphanumeric. Furthermore, splitting the invention into two differing groups of features solving two distinct technical problems results from an abstract approach. This approach is indicative of an impermissible *ex post facto* analysis. Rather, a single technical problem should be formulated as consisting in designing an alternative search mechanism for an electronic program guide which is convenient and has increased accuracy. This single problem is solved by the features in the second part of claim 1, which reflect an inventive combination, not an aggregation of features solving two independent technical problems.

E4 furthermore discloses the input of alphanumeric characters using a remote control during the one-off initial setup process of a television set, which appears at first sight to be inconvenient and therefore counterintuitive for frequent use during regular viewing as in the invention. The uninventive person skilled in the art may come up with a number of solutions for the choice of input means, for instance opting for a solution according to E3 (a remote control with an integrated keyboard). The solution according to the invention allows the accuracy to be increased without the need for additional hardware. The combination of the teaching contained in the three documents E1, E2 and E4 may be envisaged only if it suggested itself (as would be the case for E1, E2 and E3). In the present case none of the documents contains a pointer to a solution in another one, so that their combination results from impermissible hindsight.
The prior art, in particular the third search mode in E2, does not disclose an adaptation of the displayed program listing in real time.

XIV. The argumentation as regards the ground for opposition under Article 100(c) EPC 1973 (extension of subject-matter) may be summarised as follows.

The opponent argued in the notice of opposition that claims 11 and 12 are directed to a flip mode according to figure 5 and claims 13 and 14 are directed to a browse mode according to figure 11. These claims, as well as claims 15 and 16, each contain a reference to a preceding claim so that they define apparatuses combining a search mode (according to any one of claims 1 to 10) with both a flip mode and a browse mode. There is no disclosure that these modes could be combined on one screen (according to figures 38C to 38F) since they are explicitly disclosed as alternative modes of operation (see paragraph [0069] of the patent specification).

The appellant (patentee) argues that the application as originally filed states that the "By Title" option may be combined with one of the other operating modes of the system (see statement on page 48, reproduced in paragraph [0150] of the patent specification).

Reasons for the Decision

1. The appeal is admissible.
2. Public availability of document E4

2.1 Document E4 is a user manual for different (Trinitron Colour) television models manufactured by Sony. The front page of this document mentions the following copyright notice: "©1993 by Sony Corporation Printed in UK".

2.2 The opposition division introduced E4 of its own motion with the summons to oral proceedings (issued in November 2003) and assumed that E4 was comprised in the prior art. No additional information is available from the file as to the circumstances under which the opposition division obtained E4 or the reasons why they presumed its public availability before the priority date of the opposed patent.

2.3 The patent proprietor did not contest the prior availability of E4 before the opposition division. The decision under appeal was based on facts derived from E4 and the appellant in the statement of grounds of appeal did not contest these facts either. In reply to the summons to oral proceedings before the board, i.e. more than four years after E4 had been introduced, the appellant contested for the first time the prior availability of E4, arguing that the considerations as set out in decision T 511/02 (not published in OJ) concerning a printing date should apply mutatis mutandis to a copyright notice on a manual of a television set as in the present case because both a manual (E4) and fitting instructions and instructions for use and installation (the document in T 511/02) were distributed with the product.
2.4 The board in decision T 511/02 had judged that a printing date on fitting instructions and instructions for use and installation were not an adequate indication of the relevant facts, evidence and arguments for an opposition to be admissible (see point 4 of the reasons).

2.5 A notice of copyright cannot however be compared with a printing date because the first one leads to legal consequences. According to the UK Copyright Law and the jurisprudence in the member states of the Berne Convention for the Protection of Literary and Artistic Works, a notice of copyright creates a presumption that the named person was the owner of the copyright at the date of issue to the public and that the work was first published in the specified year and/or country. The facts stated in the notice of copyright are presumed to be correct unless the contrary is proved.

2.6 In the present case, the appellant's contestation of the date of first publication has not convinced the board because no evidence of another date of publication has been brought. Furthermore, the facts of the present case speak *prima facie* for prior availability, since a manufacturer of mass-produced consumer electronics such as television sets having developed new models and printed the accompanying user manual would put them on the market as soon as possible (see decision T 55/01 (not published in OJ), point 4.1). The present patent has a priority date of 29 November 1994, whereas the copyright on E4 has a date of 1993. It is thus highly unlikely that the said television models and the user manual would have been kept in stock for almost a whole year.
2.7 As a result, the board judges that E4 is comprised in the prior art according to Article 54(2) EPC 1973.

3. **Ground for opposition under Article 100(a) EPC 1973 (inventive step)**

3.1 Claim 1 combines the features of granted claims 1, 3 and 4 and corresponds to claim 1 according to the third auxiliary request, which was rejected by the opposition division.

3.2 It is not contested that E1 represents the closest prior art and discloses an apparatus according to the first part of claim 1, i.e. until the stipulation "wherein the program guide application software includes instructions... ". E1 concerns a television schedule system in which the listing of programs displayed on the screen may be filtered using qualifiers. It explicitly compares television program guides with computer menus as user interfaces (see column 2, lines 25 to 32) and mentions that qualifiers are rooted in relational databases (see column 15, lines 54 to 56), which is computer technology.

3.3 It is also not contested that E1 does not disclose the instructions defining the mode of operation in the program guide application software, i.e. features (a), (b), (c) and the features in the last paragraph of claim 1. This mode is described as the "search mode" in the context of figure 38F in the patent specification (see paragraphs [0148] and [0149]). The overall effect of these distinguishing features over E1 is that the present invention provides for text search in titles

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(instead of filtering using qualifiers; features (a) and (b)) and, using the wireless remote control, character input causing an alphabetically-arranged real time visual display of titles (end of claim 1 starting from feature (c)).

3.4 The board agrees with the appellant that a reference to an alpha-numeric search in the formulation of the objective problem solved over E1, as in the decision under appeal, would include elements of the solution because E1, in the given context, provides no text search at all. Rather, the objective problem may be seen in providing the known apparatus and its remote control with an alternative search mechanism for the television program guide which has increased accuracy than filtering by qualifiers.

3.5 The relevant person skilled in the art for solving this problem is in the board's view skilled in the art of television as well as in the art of computer technology. Character entry and text search in relational databases are typical computer applications and E1 confirms a tendency of television program guides to converge towards computer applications (see point 3.2 above). The board thus shares the respondent's opinion that a team of persons, including persons skilled in the art of both television and computer technology, is the relevant notional person skilled in the art in the present case.

3.6 The decision under appeal and the respondent expressed the opinion that the invention solves two independent partial problems. The different aspects of television and computer technology disclosed in documents E1 to E4
may have justified this approach in view of the broader independent claims of the requests which had to be decided on by the opposition division but are no longer maintained.

E1, in a different context, aims to provide for an easy and convenient retrieval of programs from a listing, for instance in order to control a video cassette recorder or play back of a recorded program (see column 1, lines 19 to 39). The person skilled in the art might therefore have envisaged a text search, such as the "Title finder" search mode disclosed in E2 (column 2, lines 30 to 37), which is one way of easily retrieving a title in a multimedia database. But the person skilled in the art would then still be confronted with the technical problem of finding a way to enter text with the use of the remote control (see E1, column 19, lines 21 to 28). The use of known computer input devices, such as a keyboard and a mouse, is impractical for the purpose of entering alphanumeric characters in the field of television. Television technology proposes various possible solutions, for instance E3 in which a full keyboard is integrated in a remote control, or E4 in which the directional keys of a conventional remote control are used to enter station names of up to five characters during setup of a television set by cycling through alphanumeric characters.

3.7 The real time changes in the display of closest match titles according to present claim 1 mitigate the inconvenience of entering individual characters of (parts of) a title by cycling through displayed alphanumeric characters in that the real time display
of search results provides the user with an overview of the available titles as the characters are sequentially cycled through. The board therefore does not share the opinion that the contribution by the subject-matter of present claim 1 over E1 may be seen in the solution of two independent partial problems (implement a search facility / finding an alternative for entering characters), but considers that it has to be considered as a combination of features interacting advantageously to contribute to the solution of the objective problem as set out in point 3.4 above.

3.8 The board sees nothing in the available prior art that would render the solution to the objective problem mentioned above obvious for the following reasons.

3.8.1 E2 describes mechanisms in which the user has to actively instruct the computer to begin the search after a search criterion has been entered (see for instance the dedicated "Go On command" mentioned in column 8, lines 36 to 38; column 9, lines 57 and 58; or column 18, lines 33 to 40). The passage (column 16, line 55, to column 17, line 17) relating to the "Title Finder" entry path identified by the parties as the most relevant passage of E2 is silent as to whether such a dedicated "Go On command" is necessary. The third searching mode (column 17, lines 9 to 17), referred to in the decision under appeal, allows the user to access a particular page of the alphabetical title list by directly clicking on any one of the letter tabs displayed on the screen. This direct access to one page is substantially different from an automatic refresh during the sequential access implied by cycling through alphanumeric characters. As a result,
the board does not agree with the opposition division that changing the display of television program titles in real time is derivable in an obvious way from E2.

3.8.2 E4 discloses a setup mode allowing the user to attribute names to channels. The names constitute channel labels and should thus be unique identifiers, so that E4 rather teaches away from suggesting already attributed channel names during cycling through alphanumerical characters. No other prior art document cited in the procedure shows the feature either.

3.8.3 As a result, the prior art does not hint at a real-time update during cycling. This incremental search feature may be ubiquitous and considered as common general knowledge in present user interfaces (also referred to for instance as "Find as you type" (FAYT) or "word wheeling" in present computer terminology). However, there is no evidence on file that it was known before the priority date (29 November 1994) of the present application.

3.9 As a result, the board judges that the subject-matter of claim 1 involves an inventive step in the meaning of Article 56 EPC 1973.

4. Ground for opposition under Article 100(c) EPC 1973 (extension of subject-matter)

4.1 This ground has been raised against granted dependent claims 11 to 16, which correspond to claims 9 to 14 according to the present request.
4.2 The opponent argued in the notice of opposition that displaying the features of the "By Title" mode (as in figures 38C to 38F) combined with features of a flip and/or browse mode on one screen was not disclosed in the initial application documents.

The dependent claims recite however that the program guide application software includes instructions for causing the data processing means "to switch to" a mode (a flip mode for claims 9 and 10; a browse mode for claims 11 and 12) in response to commands from the user. They therefore do not define modes of operation that could be selected so as to display simultaneously on one screen features of the selected modes, but they define that the software may include instructions for these modes of operation, from which the user may select one mode at a time during operation, as an alternative to the "By Title" mode according to claims 1 to 8. This combination of features is derivable from the initial disclosure, which states that the "By Title" option may be combined with one of the other operating modes of the system (see the corresponding paragraph [0150] of the patent specification) and that the user may change between alternative flip and browse by toggling a mode button (see the corresponding paragraph [0069] of the patent specification).

4.3 As a result, the board judges that the subject-matter of claims 9 to 12 does not extend beyond the content of the application as filed. The same applies to claims 13 and 14, which contain the definition of a television receiver connected to the apparatus, which subject-matter is already recited in claim 1.
5. Remittal to the first instance

The claims according to the sole request meet the requirements of the EPC. The description is however presently not adapted. In particular it neither indicates the relevant background art nor discloses the invention as claimed.

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 with the following claims and a description to be adapted:
   - Claims 1 to 14 filed with the letter of 15 April 2008 (denoted as "Auxiliary Request II").

The Registrar

The Chairman

D. Sauter

F. Edlinger