(57) Abstract: Disclosed is a remote control device that interacts with a set-top box to provide selective programming and/or enhanced content based upon the identity of the user of the remote control. The present invention utilizes preference and profile data corresponding to the current user to control the video output and/or enhanced content of the display. The present invention can also select or exclude video or enhanced content based upon tags that describe video content and the identity of the user based upon the use of a personalized remote control. The present invention can employ recognition techniques, such as word recognition, image recognition and sound recognition to restrict or select video content based upon the identity of the user of a personalized remote control device.

Published:
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
### INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

- IPC 7: H04N5/445, H04N7/16, G07C9/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

- Minimum documentation searched (classification system followed by classification symbols):
  - IPC 7: H04N G07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used):

- EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>X</td>
<td>US 6 020 882 A (KINGHORN JOHN R ET AL) 1 February 2000 (2000-02-01)</td>
<td>1, 2, 4, 5, 7, 10, 14, 15, 17, 20, 23, 3, 11-13, 16, 18, 24-26</td>
</tr>
</tbody>
</table>
| Y        | column 6, line 32 - line 65 column 11, line 41 - line 63

| X        | US 5 758 257 A (HERZ FREDERICK ET AL) 26 May 1998 (1998-05-26) column 26, line 30 - line 50 column 45, line 56 - line 63
|----------|---------------------------------------------------------------------------------|-----------------------|
|          |                                                                                 | 1, 2, 9, 14, 15, 22

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

**Date of the actual completion of the international search**

14 March 2002

**Date of mailing of the international search report**

22/03/2002

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**Authorized officer**

Sindic, G
<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 5 861 881 A (FREEMAN MICHAEL J ET AL) 19 January 1999 (1999-01-19) column 6, line 45 - line 51 column 18, line 52 - column 19, line 18</td>
<td>3,16,18</td>
</tr>
<tr>
<td>Patent document cited in search report</td>
<td>Publication date</td>
<td>Patent family member(s)</td>
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<td>-------------------------</td>
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<tr>
<td></td>
<td>CN 1217850 T</td>
<td>26-05-1999</td>
</tr>
<tr>
<td></td>
<td>EP 0904658 A1</td>
<td>31-03-1999</td>
</tr>
<tr>
<td></td>
<td>WO 9836569 A1</td>
<td>20-08-1998</td>
</tr>
<tr>
<td></td>
<td>JP 2000515349 T</td>
<td>14-11-2000</td>
</tr>
<tr>
<td></td>
<td>AU 4410396 A</td>
<td>19-06-1996</td>
</tr>
<tr>
<td></td>
<td>CA 2207686 A1</td>
<td>06-06-1996</td>
</tr>
<tr>
<td></td>
<td>EP 0796538 A2</td>
<td>24-09-1997</td>
</tr>
<tr>
<td></td>
<td>US 6020883 A</td>
<td>01-02-2000</td>
</tr>
<tr>
<td></td>
<td>WO 9617467 A2</td>
<td>06-06-1996</td>
</tr>
<tr>
<td></td>
<td>US 5734720 A</td>
<td>31-03-1998</td>
</tr>
<tr>
<td></td>
<td>US 5835087 A</td>
<td>10-11-1998</td>
</tr>
<tr>
<td></td>
<td>US 6088722 A</td>
<td>11-07-2000</td>
</tr>
<tr>
<td></td>
<td>US 6029195 A</td>
<td>22-02-2000</td>
</tr>
<tr>
<td></td>
<td>AU 2265997 A</td>
<td>28-08-1997</td>
</tr>
<tr>
<td></td>
<td>CA 2245841 A1</td>
<td>14-08-1997</td>
</tr>
<tr>
<td></td>
<td>WO 9729458 A1</td>
<td>14-08-1997</td>
</tr>
<tr>
<td></td>
<td>AU 5864996 A</td>
<td>29-11-1996</td>
</tr>
<tr>
<td></td>
<td>EP 1098532 A2</td>
<td>09-05-2001</td>
</tr>
<tr>
<td></td>
<td>EP 1100276 A2</td>
<td>16-05-2001</td>
</tr>
<tr>
<td></td>
<td>EP 1098533 A2</td>
<td>09-05-2001</td>
</tr>
<tr>
<td></td>
<td>EP 1098534 A2</td>
<td>09-05-2001</td>
</tr>
<tr>
<td></td>
<td>WO 9637075 A1</td>
<td>21-11-1996</td>
</tr>
<tr>
<td></td>
<td>US 6252586 B1</td>
<td>26-06-2001</td>
</tr>
<tr>
<td></td>
<td>US 6204843 B1</td>
<td>20-03-2001</td>
</tr>
<tr>
<td></td>
<td>US 6215484 B1</td>
<td>10-04-2001</td>
</tr>
<tr>
<td></td>
<td>US 2001013123 A1</td>
<td>09-08-2001</td>
</tr>
<tr>
<td></td>
<td>US 6181334 B1</td>
<td>30-01-2001</td>
</tr>
<tr>
<td></td>
<td>AU 3134993 A</td>
<td>28-06-1993</td>
</tr>
<tr>
<td></td>
<td>MX 9206772 A1</td>
<td>01-05-1993</td>
</tr>
<tr>
<td></td>
<td>WO 9311617 A1</td>
<td>10-06-1993</td>
</tr>
</tbody>
</table>