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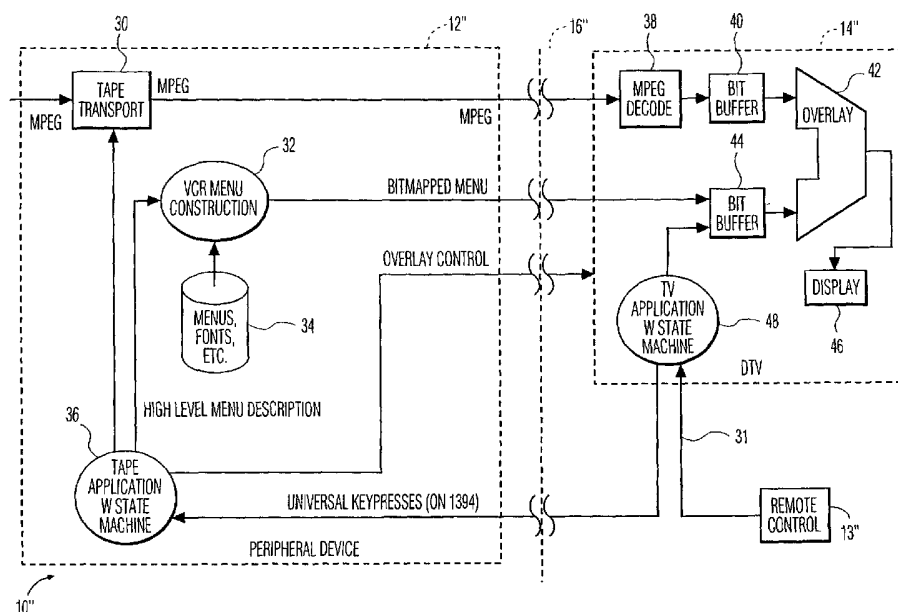
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- Published:**  
— with international search report

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR IMPROVED DEVICE INTEROPERABILITY



(57) Abstract: An apparatus and method for controlling a plurality of electronic devices, such as consumer electronic device, or the like, via a digital bus. In particular, the present invention provides for improved interoperability of such devices over the digital bus. In one embodiment, the present invention transfers identifying information from a peripheral device to a display device during a discovery mode for providing a device selection screen having a plurality of device icons displayed thereon. The device icons are generated by the display, or controlling device, in response to identifying information, such as keywords stored in a configuration ROM of the peripheral device.

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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**

International Application No

PCT/US 01/15341

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 H04L12/28 H04N7/24

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 H04L H04N

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**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 49057 A (SONY CORP ;SONY ELECTRONICS INC (US)) 24 December 1997 (1997-12-24) abstract page 8, line 18 - line 20 page 9, line 10 - line 19 page 10, line 20 -page 11, line 17	1-3,5,7, 8,10
Y	page 17, line 13 - line 20 page 21, line 16 - line 24  ----- -/--	4,6,9, 11,27-34

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "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

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search  
  
22 July 2002

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## INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 955 774 A (SAMSUNG ELECTRONICS CO LTD) 10 November 1999 (1999-11-10) abstract column 1, line 33 - line 48 column 2, line 21 - line 30 column 3, line 32 - line 55 column 4, line 10 - line 26 column 5, line 2 - line 8 column 5, line 32 - line 38	4,6,9, 11,27-34
A	figure 4	1-3,5,7, 8,10
A	--- "THE HAVi ARCHITECTURE, VERSION 0.8" HAVI ARCHITECTURE, XX, XX, no. 8, 15 May 1998 (1998-05-15), pages 6-18, XP002089719 the whole document	1-11, 27-34
A	--- US 5 995 106 A (CLANTON III CHARLES H ET AL) 30 November 1999 (1999-11-30) abstract figure 20	1,7,27, 31
A	--- EP 0 838 768 A (HEWLETT PACKARD CO) 29 April 1998 (1998-04-29) abstract page 2, line 18 - line 29	1,7,27, 31
Y	--- US 5 969 750 A (WANG SHYH-RONG ET AL) 19 October 1999 (1999-10-19) column 3, line 20 - line 55 column 4, line 12 - line 46 column 6, line 43 -column 7, line 6 column 7, line 59 - line 67 column 8, line 16 -column 9, line 11 column 10, line 36 - line 44	12-26
Y	--- EP 0 996 069 A (HEWLETT PACKARD CO) 26 April 2000 (2000-04-26) column 3, line 13 - line 24 column 4, line 31 - line 46	12-26
A	--- FR 2 779 596 A (THOMSON MULTIMEDIA SA) 10 December 1999 (1999-12-10) abstract page 1, line 18 - line 33 page 3, line 1 - line 14	12-26
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 01/15341

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-11, 27-34

Use of device icons and multiple user interfaces to generate OSD signals for the devices connected to the digital bus.

2. Claims: 12-26

Use of bitrate information at the setup of the device to establish an isochronous channel on the digital bus.

## INTERNATIONAL SEARCH REPORT

ation on patent family members

Intern: Application No

PCT/US 01/15341

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