



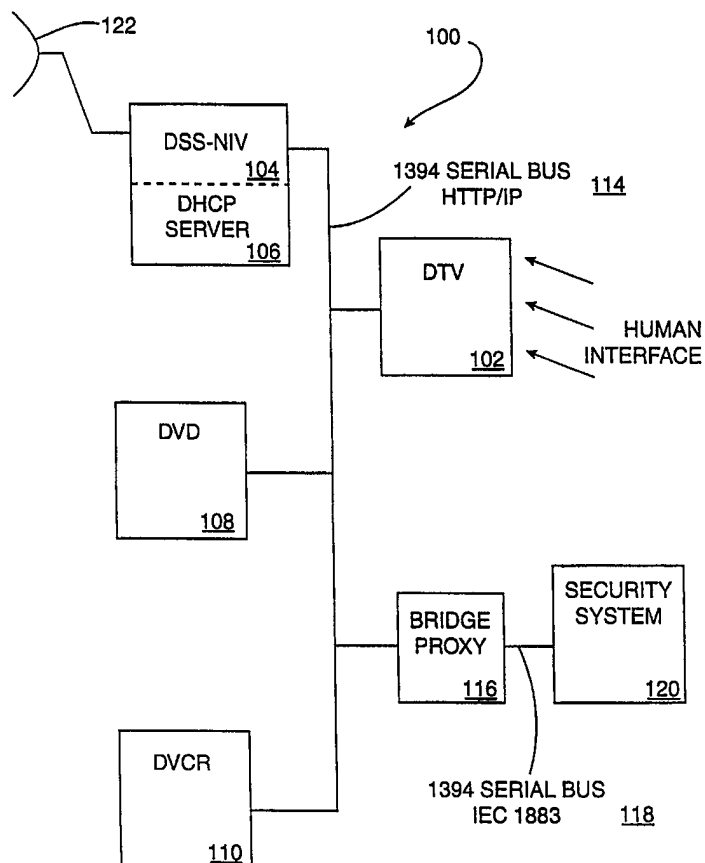
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(54) Title: BROWSER BASED COMMAND AND CONTROL HOME NETWORK

(57) Abstract

A method and system for commanding and controlling diverse home devices. A first home device capable of displaying user interface data is connected to a home network. A second home device stores user interface data that defines a user interface for commanding and controlling the second home device, also connected to the homenetwork. The first device receives the user interface data from the second device over the network. The first device then displays the user interface as defined by the data. The user interacts with the user interface displayed on the first device by a control device. User input is accepted from the user responsive to the interaction. Control and command information is sent from the first home device to the second home device in order to control the second device according to the user input. Since the user interface can be displayed from any device, a single control device may control a plurality of different devices without requiring any change in the mode of operation of the control device.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 98/01112

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁶: G 06 F 13/38; H 04 L 12/18

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)

IPC⁶: G 06 F

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 practicable, search terms used)

WPI, EPODOC, PAJ, the Internet, <http://www.ieee.com>"Search"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	hti news, Vol.1 Issue 1, October 1996 [online][retrieved on 3 September 1999]. Retrieved from the Internet<URL: http://www.hometoys.com/htinews/oct96/index0101.htm >*Home Vision; Comparison.	1-5,23-30
X	WO 96/22 644 A (IBM), 25 July 1996 (25.07.96), totality.	1-5,9-10
A	US 5 612 730 A (LEWIS), 18 March 1997 (18.03.97), totality.	1,12
A	EP 398 640 A (IBM), 22 November 1990 (22.11.90), abstract.	1

☐ Further documents are listed in the continuation of Box C.

☒ See patent family 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 application or patent 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

06 September 1999 (06.09.99)

Date of mailing of the international search report

16 September 1999 (16.09.99)

Name and mailing address of the ISA/AT

Austrian Patent Office
Kohlmarkt 8-10; A-1014 Vienna
Facsimile No. 1/53424/200

Authorized officer

Fastenbauer

Telephone No. 1/53424/447

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 98/01112

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 Extra 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~~ ^{some} 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~~ ^{for the claims 2-5, 9-10, 12, 23-30} search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
C1.1, C1.2-5, 9-10, 12, 23-30
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.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 98/01112

Box II: Unity of Invention is lacking

The application consists "a posteriori" of the following multiple inventions:

Claims	Invention
2	... selected interface data ...
3-5	... configuration manager ... 1st home device
6	... HTML data ...
7-8	... serial bus ...
9-10	... Ethernet ...
11	... second bus ...
12	... connecting the home network to the Internet ...
13-15	... HTML page ...
16-17	... configuration manager ... 2nd home device
18	... HTML, XML, JAVA ...
19	... Internet Protocol ...
20	... layer other than IP network layer ...
21	... Function control protocol ...
22	... sending control and command information over the Internet ...
23	A home network system ...
24-25	Control system for controlling a plurality of devices ... communicating either with said client device ...
26-27	Control system for controlling a plurality of devices ... communicating (alternate) with any one of said plural devices ... to perform a predetermined function ...
28-29	Control system for controlling a plurality of devices ... communicating with any one of said plural devices ... by providing a control command ...

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/IB 98/01112

Im Recherchenbericht angeführtes Patentedokument Patent document cited in search report Document de brevet cité dans le rapport de recherche			Datum der Veröffentlichung Publication date Date de publication	Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la famille de brevets	Datum der Veröffentlichung Publication date Date de publication
WO	A	9622644		keine - none - rien	
US	A	5612730	18-03-1997	AU A1 51776/96	23-09-1996
				BR A 9607539	23-12-1997
				CA AA 2214650	12-09-1996
				EP A1 813794	29-12-1997
				JP T2 11501780	09-02-1999
				NZ A 304562	28-01-1999
				WO A1 9627989	12-09-1996
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