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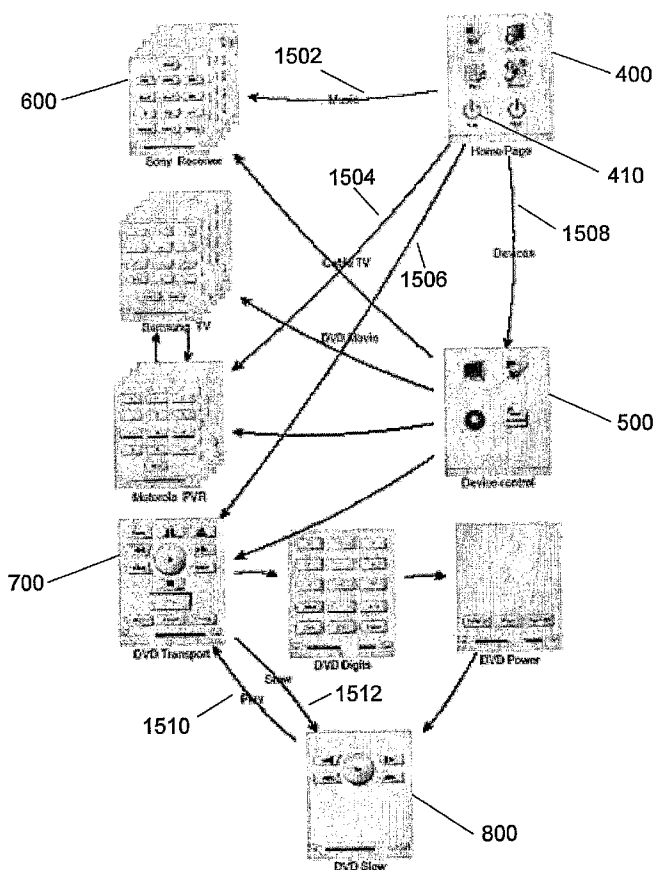
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[Continued on next page]

(54) Title: CONFIGURABLE CONTROLLING DEVICE HAVING AN ASSOCIATED EDITING PROGRAM



(57) Abstract: A configurable controlling device (100) and associated editor program that allows a consumer to create on a personal computer (302) for downloading to the controlling device a user interface (400) comprised of user interface pages having icons which icons, when activated on the controlling device, cause the controlling device to perform a function, such as to transmit a command to an appliance, to change the user interface page being displayed, etc. The editor program allows for the visualization of links (1502-1512) created between user interface pages (400, 500, 600, 700, 800), single step assigning of commands to logical groups of function keys (both iconic and hard keys), single step assigning of backgrounds to groups of user interface pages (400, 500, 600, 700, 800), and pre-rendering of user interface pages prior to the downloading of the user interface (400) to the controlling device (100).



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/31598

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 3/00(2007.01)

USPC: 715/762,854,763,771,967;348/734

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)

U.S. : 715/762,854,763,771,967,765,866,847,773,970,853; 715/501.1; 345/172,168; 348/734

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)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,211,870 B1 (FOSTER) 03 April 2001 (03.04.2001), abstract, figs 7,9-11, column 9, line 46 - column 10, line 64, column 5, line 49 - column 6, line 18.	1 - 13
Y	US 5,555,369 A (MENENDEZ et al) 10 September 1996 (10.09.1996), abstract, figs 8-9, column 15, line 64 - column 16, line 16.	1 - 13
Y,P	US 2005/0,071,749 A1 (GOERKE et al) 31 March 2005 (31.03.2005), abstract, figs 3, 7; paragraphs [0053],[0057].	1 - 13
A	US 2002/0,199,025 A1 (KUTAY et al) 26 December 2002 (26.12.2002), abstract, figs 8-11, 16-18B, paragraphs [0075],[0096].	1 - 13
A	PCT WO 00/39772 (PHILIPS ELECTRONICS) 06 July 2000 (06.07.2000), abstract, fig 1, pages 7 - 8.	1 - 13

RAYMOND J. BAYERL
PRIMARY EXAMINER

5 December 2006

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

See patent family and

ART UNIT 2173

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/31598

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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 No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation 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 additional fees, this Authority did not invite payment of any additional fees.
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.: 1 - 13

- Remark on Protest**
- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
 - ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
 - ☐ No protest accompanied the payment of additional search fees.

BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

- I. Claims 1 - 13, drawn to the creation of links between GUI pages,
- II. Claims 14 - 28, drawn to the association of commands with keys,
- III. Claims 29 - 39, drawn to the setting of a GUI background image, and
- IV. Claims 40 - 44, drawn to the selection of an image for an unactivated soft key. The inventions listed as Groups I, II, III, IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Though a GUI is being configured in each of the groups, the special technical features of the portions of that GUI that are set differ significantly from one group to another. Linked GUI pages as per group I involve technical features apart from mapping keys, setting backgrounds, or selecting images for soft keys, as in respective groups II, III, IV. Different inventive concepts are being introduced with each group.