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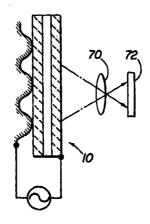
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(88) Date of publication of the international search report:

18 November 1999 (18.11.99)

(54) Title: METHOD AND SYSTEM FOR COMPUTER ACCESS AND CURSOR CONTROL USING A RELIEF OBJECT IMAGE **GENERATOR**



(57) Abstract

A system and method for using a relief object image generator for cursor control, computer access control, and operational parameter control is disclosed. The system includes a relief object image generator (10), a sensor array (72), an image processor, and a memory. The relief object image generator (10) generates images of relief objects, such as fingerprints, brought in proximity of the exposed surface of the image generator (10). The image processor receives the image from the sensor array (72), processes the image, and compares the resulting descriptive information to stored information corresponding to authorized users. If a match is found, the user is granted access to the computer. The image processor may also process the image to determine image movement or the image's presence or absence. Detected movement is used to generate directional signals while the presence and absence of the image is used to generate highlight and select signals. These signals conform to those generated by known mouse devices so the system of the present invention can replace a position variable device in the keyboard of a laptop or other portable computer without sacrificing functionality for the system. Other uses of the system disclosed herein include control of operational parameters for a device such as brightness and contrast for a monitor and the transmission of relief object images to remote sites for authentication of a user.

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. CLASSIFICATION OF SUBJECT MATTER PC 6 G06F1/00 G06K G06K11/18 G06K11/08 G06K9/00 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) G06F G06K A61B IPC 6 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) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° WO 97 29477 A (SCOTT JOHN DOUGLAS ; IDENTIX 28 - 30, X INC (US)) 14 August 1997 (1997-08-14) 32, 34-42. 80-93, 102-104, 107, 109-119, 127,128, 130 - 133, 135, 137-141 abstract page 2, line 30 - page 4, line 7 page 4, line 17 - line 25 page 5, line 6 - line 22 page 10, line 1 - page 12, line 32; figure 1 page 13, line 6 - line 13 page 14, line 7 - line 30 Further documents are listed in the continuation of box C. X Patent family members are listed in annex Special categories of cited documents : *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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another 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 citation or other special reason (as specified) document is combined with one or more other such documents, such combination being obvious to a person skilled *O* document referring to an oral disclosure, use, exhibition or other means in the art. document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 24, 09, 1999 9 September 1999 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Bravo, P

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		PC1/US 98/24923
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INTERNATIONAL SEARCH REPORT

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Interr	national Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. (k	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
	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 Inter	rnational Searching Authority found multiple inventions in this international application, as follows:
	see additional sheet
1. X	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	The additional search fees were accompanied by the applicant's protest. X 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: 1-20, 28-44, 52-73, 80-93, 101-119, 127-141

Method and system for identifying a user prior to computer activation using a relief object image generator

2. Claims: 21-24, 45-48, 74-76, 94-97, 120-123, 142-145

Method and system to obtain an image of an object positioned in the proximity of a platen interposed between the electroluminescent device and the sensor array of a relief object image generator

3. Claims: 25-27, 49-51, 77-79, 98-100, 124-126, 146-148

Method and system for pen input using a relief object image generator

.iformation on patent family members

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