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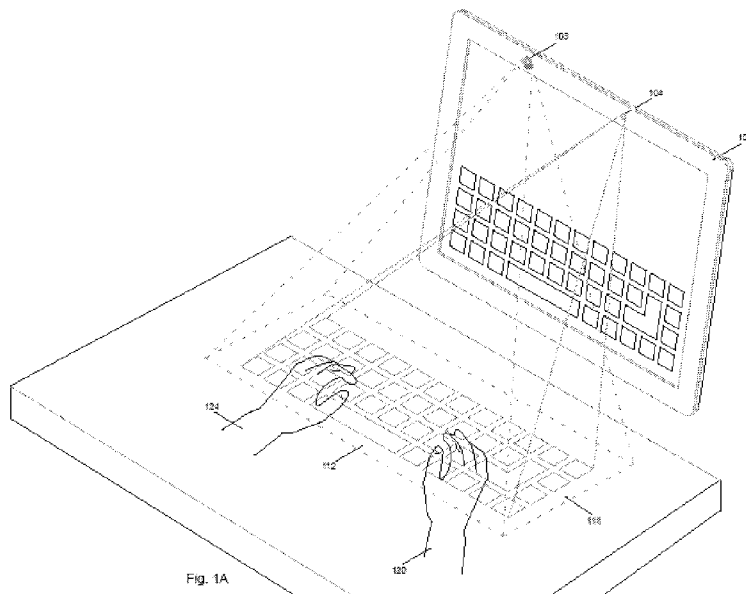
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(54) Title: METHODS CIRCUITS APPARATUSES SYSTEMS AND ASSOCIATED COMPUTER EXECUTABLE CODE FOR PROVIDING PROJECTION BASED HUMAN MACHINE INTERFACES



(57) Abstract: A computerized method and apparatus for providing input to a computing platform from a user. The apparatus comprises a computing platform, a projection device for projecting an image to be displayed to a user, and a capturing device for capturing a reflection of the image or part thereof and hand or hands of a user in the vicinity of the projected image. The location of the user's hands is associated with a symbol or control command associated with the area of the projected image, and the symbol or control command are input to the computing platform or to an application associated with the projected image. A registration stage may be used for creating the association. A skeleton model may be used for determining the location of the user's hands.

## INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(8) - G06F 3/01 (2013.01) USPC - 345/168 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC(8) - G06F 3/01, 3/03; G06T 3/00 (2013.01) USPC - 345/156, 168; 382/294		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched CPC - G06F 3/011, 3/0304; G06T 7/0028 (2013.01)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase, Google Patents, Google Scholar		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/0024324 A1 (TOMASI et al) 03 February 2005 (03.02.2005) entire document	1-22
Y	US 5,528,263 A (PLATZKER et al) 18 June 1996 (18.06.1996) entire document	1-22
Y	US 2006/0139314 A1 (BELL) 29 June 2006 (29.06.2006) entire document	2,6-10,12,17-20,22
Y	US 2004/0136564 A1 (ROEBER et al) 15 July 2004 (15.07.2004) entire document	4,10,15,16,20
A	US 2007/0222760 A1 (LIEBERMAN et al) 27 September 2007 (27.09.2007) entire document	1-22
A	US 2002/0060669 A1 (SZE) 23 May 2002 (23.05.2002) entire document	1-22
A	US 2002/0061217 A1 (HILLMAN et al) 23 May 2002 (23.05.2002) entire document	1-22
A	US 2002/0171633 A1 (BRINJES) 21 November 2002 (21.11.2002) entire document	1-22
A	US 2005/0012721 A1 (FONG et al) 20 January 2005 (20.01.2005) entire document	1-22
A	US 2005/0206730 A1 (HAGIWARA) 22 September 2005 (22.09.2005) entire document	1-22
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774