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(54) Title: KEYPAD FOR PROVIDING TACTILE FEEDBACK FOR USE WITH A TOUCH SCREEN

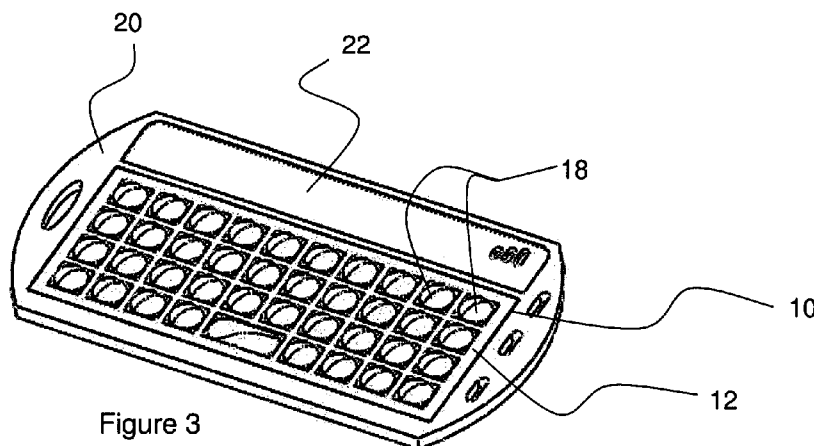


Figure 3

(57) Abstract: A keypad including an elastic sheet for disposing on a touch screen, the sheet including at least one key member shaped to define a space within the key member for providing tactile feedback when the key member is depressed and contacts the touch screen and a mounting element, for mounting the elastic sheet on the touch screen, coupled to the elastic sheet.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL 10/00034

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06F 3/01 (2010.01) USPC - 715/702 According to International Patent Classification (IPC) or to both national classification and IPC</p>												
<p>B. FIELDS SEARCHED</p>												
<p>Minimum documentation searched (classification system followed by classification symbols) USPC - 715/702</p>												
<p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 715/700; 345/173</p>												
<p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (PGPB, USPT, EPAB, JPAB); Google Search Terms Used: keypad keyboard input device elastic pliant flexible stretchy rubbery sheet layer membrane panel key member tactile palpable physical tangible touch concrete feedback touch-screen mount dome arch tactile plate conduct elongate shell rigid finger</p>												
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p>												
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X --- Y	US 2005/0099403 A1 (Kraus, et al.) 12 May 2005 (12.05.2005): Abstract; Title; Fig 1, 3a-3d, and 4; para [0010], [0014], [0025], [0030], [0033]-[0036], [0039], [0050])	1-2, 11, and 15 ----- 14 and 16										
X --- Y	US 2008/0316180 A1 (Carmody, et al.) 25 December 2008 (25.12.2008): Abstract; Fig 1, 3, 4a, 4b, 5a, 5b, 6a, 6b; para [0002], [0006], [0019], [0021]-[0022], [0024], [0029], [0031], [0033]-[0036]	1-3, 5, and 15 ----- 4, 8-10, 14, and 16										
Y	US 4,194,105 A (Hodges) 18 March 1980 (18.03.1980): Fig 1	4										
Y	US 4,555,600 A (Morse) 26 November 1985 (26.11.1985): Fig 2-5	4										
Y	US 6,488,425 B1 (Spence, et al.) 03 December 2002 (03.12.2002): Fig 2	4										
Y	US 5,510,782 A (Norris, et al.) 23 April 1996 (23.04.1996): Abstract; Fig 2; col 2, ln 19-22, 38-42, 54-60	8 and 10										
Y	US 6,377,685 B1 (Krishnan) 23 April 2002 (23.04.2002): Abstract; Fig 2, 3, and 6B; col 14, ln 1-29; col 15, ln 43-52	9										
Y	US 6,225,988 B1 (Robb) 01 May 2001 (01.05.2001): Abstract; Fig 1, 2, 4; col 1, ln 14-18; col 2, ln 33-37, 62-67; col 4, ln 8-15; col 5, ln 46-50	14 and 16										
<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>												
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent but published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"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)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"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 but 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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"E" earlier application or patent but 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											
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"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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<p>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</p>		<p>Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>										

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL 10/00034

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.: 6, 7, and 12-13
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:

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 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.:

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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL 10/00034

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,667,738 B2 (Murphy) 23 December 2003 (23.12.2003): Abstract; Fig 1-2; col 5, ln 5-34; col 6, ln 12-27.	1, 2, and 15
X	US 6,636,203 B1 (Wong et al.) 21 October 2003 (21.10.2003): Abstract; Fig 5 & 7	1, 2, and 15
A	US 7,403,191 B2 (Sinclair) 22 July 2008 (22.07.2008)	1-5, 8-11 and 14-16
A	US 6,492,978 B1 (Selig et al.) 10 December 2002 (10.12.2002)	1-5, 8-11 and 14-16
A	US 2004/0056877 A1 (Nakajima) 25 March 2004 (25.03.2004)	4
A	US 5,231,386 A (Brandenburg, et al.) 27 July 1993 (27.07.1993)	4
A	US 4,018,999 A (Robinson, et al.) 19 April 1977 (19.04.1977)	4