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- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

[Continued on next page]

(54) Title: APPLICATION SELECTING DEVICE COUPLED TO OPERATE WITH A SMART-PHONE CONNECTOR AND METHODS OF USE THEREOF

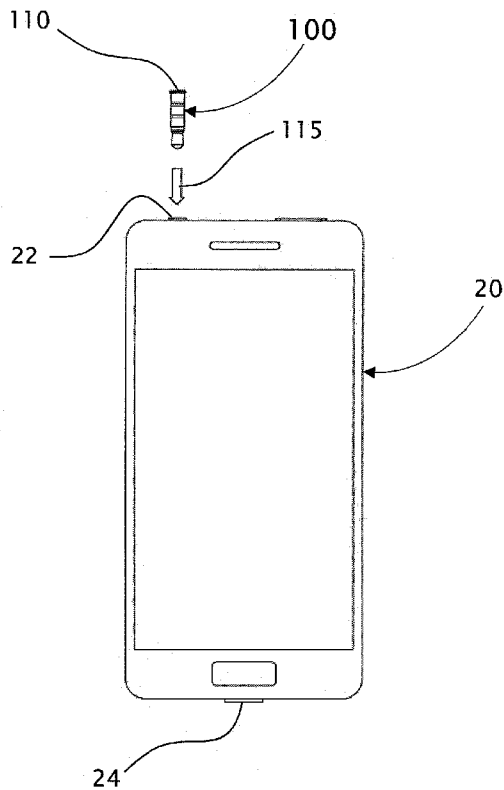


Fig. 1

(57) Abstract: A selecting device coupled to operate with a port of a smart-phone, wherein the device configured to perform variety of activities on the smart-phone, using customized sequences of button presses. For example, pressing the button a single time activates the camera of the smart-phone and pressing the button twice activates the flashlight of the smart-phone.





(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*

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

16 April 2015

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2014/050656

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06F 3/02 (2014.01) CPC - G06F 3/02 (2014.09) 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) IPC(8) - G06F 1/16, 3/02, 15/16; H04M 1/247 (2014.01) USPC - 320/107; 455/556.1, 455/557</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched CPC - G06F 1/1632, 3/02; H04M 1/247, 1/72527 (2014.09) (keyword delimited)</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase, Orbit, Google Patents, ProQuest Search terms used: smartphone, jack, port, button, press, device, sequences, biasing, earphone</p>																																																												
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>EP 1 455 513 A1 (BARTSCH et al) 08 September 2004 (08.09.2004) entire document.</td> <td>1-8,10,12,14,15,17,19-21, 23-27,38-53,55-64</td> </tr> <tr> <td>Y</td> <td>US 2009/0005005 A1 (FORSTALL et al) 01 January 2009 (01.01.2009) entire document.</td> <td>1-8,10,12,14,15,17,19-21, 23-27,51,60,61</td> </tr> <tr> <td>Y</td> <td>US 2002/0029060 A1 (HOGENDIJK) 07 March 2002 (07.03.2002) entire document.</td> <td>10,12,14,24,42-46,56</td> </tr> <tr> <td>Y</td> <td>US 2013/0045775 A1 (HEYWOOD) 21 February 2013 (21.02.2013) entire document.</td> <td>17, 49, 50</td> </tr> <tr> <td>Y</td> <td>US 2013/0095810 A1 (MORETON et al) 18 April 2013 (18.04.2013) entire document.</td> <td>20, 21, 52, 53</td> </tr> <tr> <td>--</td> <td></td> <td>----</td> </tr> <tr> <td>A</td> <td></td> <td>22, 54</td> </tr> <tr> <td>Y</td> <td>US 3,710,195 A (SADA et al) 09 January 1973 (09.01.1973) entire document.</td> <td>23-27,55-59</td> </tr> <tr> <td>Y</td> <td>US 2013/0078869 A1 (GOLKO et al) 28 March 2013 (28.03.2013) entire document.</td> <td>25,26,43,45,48,50,57,58</td> </tr> <tr> <td>Y</td> <td>US 2013/0092843 A1 (TURQUETI et al) 18 April 2013 (18.04.2013) entire document.</td> <td>38-53,55-64</td> </tr> <tr> <td>Y</td> <td>US 2010/0078343 A1 (HOELLWARTH et al) 01 April 2010 (01.04.2010) entire document.</td> <td>50</td> </tr> <tr> <td>A</td> <td>US 2012/0008851 A1 (PENNOCK et al) 12 January 2012 (12.01.2012) entire document.</td> <td>1-8, 10, 12, 14, 15, 17, 19-27, 38-64</td> </tr> <tr> <td>A</td> <td>WO 2012/103554 A2 (GANTZ et al) 02 August 2012 (02.08.2012) entire document.</td> <td>1-8, 10, 12, 14, 15, 17, 19-27, 38-64</td> </tr> </tbody> </table> <p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p> <table border="1"> <tr> <td>* Special categories of cited documents:</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>"A" document defining the general state of the art which is not considered to be of particular relevance</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>"E" earlier application or patent but published on or after the international filing date</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>"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>"&" document member of the same patent family</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td></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> <table border="1"> <tr> <td>Date of the actual completion of the international search 20 January 2015</td> <td>Date of mailing of the international search report 05 FEB 2015</td> </tr> <tr> <td>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</td> <td>Authorized officer: Blaine R. 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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL2014/050656

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.: 9, 11, 13, 16, 18
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:

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 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.:
1-27, 38-64

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/IL2014/050656

Continuation of Box No. III:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-27, 38-64, drawn to a device.

Group II, claims 28-37, drawn to a method.

The inventions listed as Groups I-II 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: the special technical feature of the Group I invention: a device comprising at least two electro conductive regions as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: a method comprising analyzing said pressing-sequence, by means of determining at least one predefined long and/or predefined short press, at least one pause and their order and identifying said pressing-sequence as claimed therein is not present in the invention of Group I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of selecting device coupled to operate with a port of a smart-phone, comprising a body, wherein said device is configured to perform variety of activities on said smart-phone, using sequences of button presses on an activation button, this technical feature is not a special technical feature as it does not make a contribution over the prior art. Specifically, WO 2004/080056 A1 (BARTSCH et al) teach a selecting device (attachement device 1 with input means 4, Fig. 1, pg. 4, lines 4-28) coupled to operate with a port of a smart-phone (port 12 connectable to port 15 of mobile phone, see Fig. 1-2, pg. 5, lines 1-10), comprising a body (see Fig. 1), wherein said device is configured to perform variety of activities on said smart-phone (viewfinder function and camera functions on smartphone, pg. 3, lines 12-20), using sequences of button presses on an activation button (the input means is a 2-step button, whereby e. g. a first halfpress activates the viewfinder function (or even autofocus) for the camera and a full press actually causes a picture to be taken, pg. 3, lines 12-20; see Fig. 4, pg. 7 lines 18-40).

Since none of the special technical features of the Group I or II inventions are found in more than one of the inventions, unity of invention is lacking.