(19) World Intellectual Property Organization

International Bureau



- | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1

(43) International Publication Date 16 June 2005 (16.06.2005)

PCT

(10) International Publication Number WO 2005/055569 A3

(51) International Patent Classification⁷: H04M 1/247, G06F 3/033

(21) International Application Number:

PCT/US2004/041172

(22) International Filing Date:

19 November 2004 (19.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/724,941 1 December 2003 (01.12.2003) US

(71) Applicant (for all designated States except US): SONY ERICSSON MOBILE COMMUNICATIONS AB [SE/SE]; Nya Vattentornet, S-221 88 Lund (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SPALINK, Karin [DE/US]; 3503 Stonegate Drive, Durham, North Carolina 27705 (US). CUNNINGHAM, James, B. [US/US]; 4404 Pickwick Drive, Raleigh, North Carolina 27613 (US).

(74) Agent: MYERS BIGEL SIBLEY & SAJOVEC, P.A.; P.O. Box 37428, Raleigh, North Carolina 27627 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

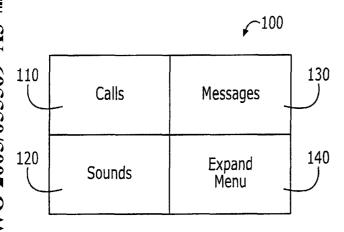
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, 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).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 20 October 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS, METHODS AND COMPUTER PROGRAM PRODUCTS PROVIDING MENU EXPANSION AND ORGANIZATION FUNCTIONS



(57) Abstract: Display of menu items on a display of an electronic device, such as a cellphone or other portable device, is managed by defining first and second menus including respective first and second groups of menu items (e.g., graphic icons and/or text), wherein the first group of menu items is a subset of the second group of menu items. The device transitions from display of the first menu to display of the second menu responsive to user activation of a menu expansion function. Menu items may be organized responsive to user input.







Inter Conal Application No PCT/US2004/041172

| A. CLASSI IPC 7 | FICATION OF SUBJECT MATTER H04M1/247 G06F3/033 | | , |
|-----------------------------------|--|--|--|
| | | | |
| According to | p International Patent Classification (IPC) or to both national classifica | tion and IPC | |
| | SEARCHED | | |
| Minimum do IPC 7 | cumentation searched (classification system followed by classification $H04M - G06F$ | in symbols) | |
| | ion searched other than minimum documentation to the extent that su | up documents are instuded in the fields co | prohod |
| Documentat | ion searched other than minimum documentation to the extent that so | rou accuments are included. In the helps sea | ndieu |
| Electronic da | ata base consulted during the international search (name of data base | e and, where practical, search terms used) | ` |
| EPO-In | ternal, WPI Data, PAJ | | |
| | · | | 1 |
| C. DOCUME | ENTS CONSIDERED TO BE RELEVANT | | |
| Category ° | Citation of document, with indication, where appropriate, of the rele | vant passages | Relevant to claim No. |
| Α | US 6 047 197 A (JARRAD ET AL) 4 April 2000 (2000-04-04) abstract | | 1,16,31 |
| A | figures 1-4 WO 01/61444 A (VTECH MOBILE LIMIT ANDRE, JEAN-MARIE) 23 August 2001 (2001-08-23) abstract | 1,16,31 | |
| Α | figures 4-9 US 2003/064757 A1 (YAMADERA HITOS 3 April 2003 (2003-04-03) abstract paragraphs [0059], [0060] figures 5,6 | 1,16,31 | |
| | | | |
| Furth | ner documents are listed in the continuation of box C. | X Patent family members are listed in | annex. |
| ° Special ca | tegories of cited documents : | "T" later document published after the Inter | national filing date |
| consid | ent defining the general state of the art which is not letted to be of particular relevance | or priority date and not in conflict with to cited to understand the principle or the invention "X" document of particular relevance; the cl | he application but ory underlying the |
| filing d "L" docume | late ant which may throw doubts on priority claim(s) or | cannot be considered novel or cannot involve an inventive step when the doc | be considered to |
| citation | is cited to establish the publication date of another n or other special reason (as specified) ant referring to an oral disclosure, use, exhibition or | "Y" document of particular relevance; the cl- cannot be considered to involve an inv document is combined with one or mor | entive step when the e other such docu- |
| other r "P" docume later th | ent published prior to the international filing date but | ments, such combination being obviou in the art. "&" document member of the same patent for the same pate | |
| | actual completion of the international search | Date of malling of the international sear | ch report |
| 9 March 2005 | | 2 4. 08. 05 | |
| Name and n | nailing address of the ISA | Authorized officer | |
| | 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 | Pohl, M | |

INTERNATIONAL SEARCH REPORT

International application No. PCT/US2004/041172

| Box 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: |
| 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 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 additional 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 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. X 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.: 1-10,16-25,31-40 |
| Remark on Protest 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: 1-10,16-25,31-40

A method and a device of managing display of menu items on a display of an electronic device by expanding, using a menu expansion function, a first group of menu items to a second group of menu items, the first group being a subset of the second group.

2. claims: 11-15,26-30,41-46

A method and a device of managing display of menu items on a display of an electronic device by changing, using a rearrangement function, the position of a menu item in an array of menu items.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Internation No PCT/US2004/041172

| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
|---|----|---------------------|----------------------|---|--------------------------|
| US 6047197 | А | 04-04-2000 | AU WO | 5727298 A 9830004 A1 | 31-07-1998 09-07-1998 |
| WO 0161444 | Α | 23-08-2001 | GB AU DE WO | 2365675 A 3213001 A 10195665 T5 0161444 A2 | |
| US 2003064757 | A1 | 03-04-2003 | JP | 2003108280 A | 11-04-2003 |