(19) World Intellectual Property Organization

International Bureau



(10) International Publication Number WO 2009/085893 A3

(43) International Publication Date 9 July 2009 (09.07.2009)

(51) International Patent Classification:

G06F 1/26 (2006.01) G06F 1/28 (2006.01)

H04B 1/40 (2006.01) G06F 1/32 (2006.01)

(21) International Application Number:

PCT/US2008/087323

(22) International Filing Date:

18 December 2008 (18.12.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11/962,798 21 December 2007 (21.12.2007) US

(71) Applicant (for all designated States except US): PALM, INC. [US/US]; 950 W. Maude Avenue, Sunnyvale, California 94085-2801 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): TU, Jerome C. [US/US]; 12196 Candy Lane, Saratoga, California 95007 (US). CURRY, Foster [US/US]; 1518 Walnut St., Berkeley, California 94709 (US).
- (74) Agent: KACVINSKY, John F.; Kacvinsky LLC, c/o Intellevate, P.O. Box 52050, Minneapolis, Minnesota 55402 (US).
- (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, BR, BW, BY, BZ, CA, CH, 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, IS, JP, KE, KG, KM, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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 (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- $\textbf{(88)} \ \ \textbf{Date of publication of the international search report:}$

17 September 2009

(54) Title: TECHNIQUES TO MANAGE POWER BASED ON MOTION DETECTION

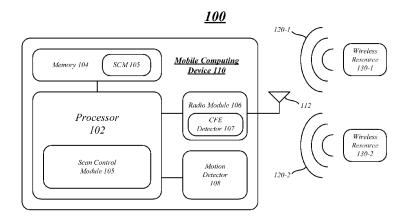
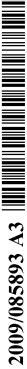


FIG. 1

(57) Abstract: Techniques to manage power based on motion detection are described. For example, a mobile computing device may include a radio module having a communications failure event detector operative to detect a communications failure event, a motion detector operative to detect motion, and a processor coupled to the radio module and the motion detector. The processor operative to execute a scan control module to determine the mobile computing device is moving or stationary, and control scanning operations by the radio module in accordance with the determination. Other embodiments are described and claimed.





International application No. **PCT/US2008/087323**

A. CLASSIFICATION OF SUBJECT MATTER

G06F 1/26(2006.01)i, H04B 1/40(2006.01)i, G06F 1/28(2006.01)i, G06F 1/32(2006.01)i

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)

IPC8 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS (KIPO internal) & keywords: "power, mobile, motion, detect, scan"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20060119508 A1 (JOHN DAVID MILLER) 08 Jun. 2006 See the abstract; figures 1, 2; paragraphs [0013] - [0030].	1-3, 11-13
A	US 20020147024 A1 (YONGBING WAN) 10 Oct. 2002 See the abstract; figure 1; paragraphs [0032] - [0037].	1-3, 11-13
A	US 20070184835 A1 (YIGAL BITRAN et al.) 09 Aug. 2007 See the abstract; figure 1; paragraphs [0038] - [0042].	1-3, 11-13
A	US 20070091847 A1 (BYOUNG-CHUL LEE) 26 Apr. 2007 See the abstract; figure 1; paragraphs [0020] - [0028].	1-3, 11-13

	1			
l	Further documents are	11-4-11-4	1	- f D O
	i Furiner documents are	nsiea in i	ne confinuation	OF BOX U.

See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- 'E" earlier application or patent but published on or after the international
- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- 'P" document published prior to the international filing date but later than the priority date claimed
- "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
- "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
- "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
- "&" document member of the same patent family

Date of the actual completion of the international search

23 JULY 2009 (23.07.2009)

Date of mailing of the international search report

29 JULY 2009 (29.07.2009)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

BAE, Kyung Hwan

Telephone No. 82-42-481-5768



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2008/087323

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.: 4-10, 14, and 15 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 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 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

	NAL SEARCH REPORT patent family members	International application No. PCT/US2008/0873	
Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 20060119508 A1	08.06.2006	NONE	
JS 20020147024 A1	10.10.2002	WO 1999-062285 A1	02.12.1999
US 20070184835 A1	09.08.2007	KR 10-2008-0099239 A WO 2007-091245 A2	12.11.2008 16.08.2007
JS 20070091847 A1	26.04.2007	KR 10-0647548 B1	23.11.2006