(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 October 2012 (04.10.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/135543 A3

(51) International Patent Classification:
G06F 3/044 (2006.01)

(21) International Application Number:
PCT/US2012/031293

(22) International Filing Date:
29 March 2012 (29.03.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/469,065 29 March 2011 (29.03.2011) US
13/434,713 29 March 2012 (29.03.2012) US

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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, 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, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH,

[Continued on next page]

(54) Title: CAPACITIVE TOUCH SCREEN INTERFERENCE DETECTION AND OPERATION

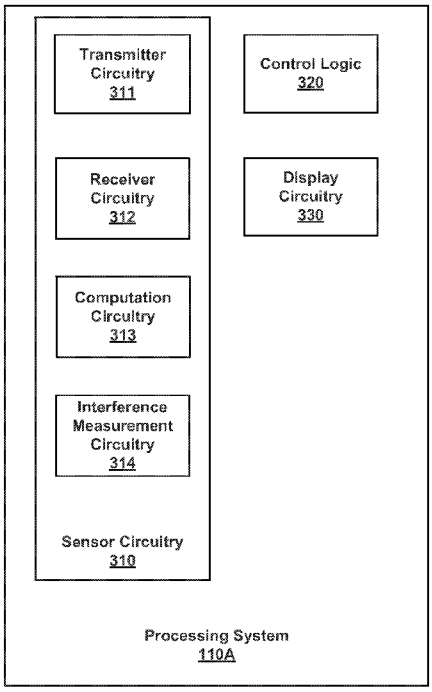


FIG. 3

(57) Abstract: A processing system for a capacitive touch screen comprises sensor circuitry and control logic. The sensor circuitry is configured to be communicatively coupled with sensor electrodes of the capacitive touch screen. The control logic is configured to operate the capacitive touch screen in a first mode comprising interference sensing at a first level and input object sensing. The control logic is also configured to operate the capacitive touch screen in a second mode instead of in the first mode in response to: interference measured in the first mode meeting an interference condition; and a determination that input is in a sensing region of the capacitive touch screen. While operating in the first mode, interference sensing is performed during a non-display update time. While operating in the second mode, interference sensing with the capacitive touch screen is either not performed or else is performed at a second level that is lower in fidelity than the first level.

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GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i))*

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

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))*

(88) Date of publication of the international search report:
27 December 2012

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/031293

A. CLASSIFICATION OF SUBJECT MATTER

G06F 3/044(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)

G06F 3/044; H04M 1/00; G06F 3/042; G09G 5/00; G06F 3/041

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
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: interference, non-display update time, fidelity

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 2006-0227115 A1 (CHARLES DAVID FRY) 12 October 2006 See paragraphs [0018]-[0019], [0028], [0029], [0040], [0047], [0052]; claims 1-3, 11; and figures 1, 7A-7G.	1-23
A	US 2008-0309628 A1 (CHRISTOPH HORST KRAH et al.) 18 December 2008 See paragraphs [0025], [0026], [0044]-[0050]; claims 1, 3; and figures 1, 4a, 4b.	1-23
A	US 2010-0295824 A1 (KOUJI NOGUCHI et al.) 25 November 2010 See paragraphs [0123]-[0131]; claims 1, 2, 10; and figure 19.	1-23
A	US 2003-0210235 A1 (JERRY B. ROBERTS et al.) 13 November 2003 See paragraphs [0087]-[0095]; claims 6-10, 59; and figures 9A-9C, 10.	1-23
A	US 2008-0158169 A1 (SEAN ERIK O`CONNOR et al.) 03 July 2008 See paragraphs [0032]-[0033], [0049]-[0052]; claims 1, 10; and figures 1, 5, 6.	1-23

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
29 OCTOBER 2012 (29.10.2012)	**30 OCTOBER 2012 (30.10.2012)**

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/031293

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