



- (51) International Patent Classification:
G06F 1/26 (2006.01)
- (21) International Application Number:
PCT/US2012/043527
- (22) International Filing Date:
21 June 2012 (21.06.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13/168,492 24 June 2011 (24.06.2011) US
- (71) Applicant (for all designated States except US): **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, Santa Clara, California 95052 (US).
- (72) Inventors; and
(71) Applicants : **RAVICHANDRAN, Krishnan** [US/US]; 20323 Glen Brae Drive, Saratoga, California 95070 (US).
KRISHNAMURTHY, Harish K. [IN/US]; 1241 NE Orenco St. PKWY, Apt. G308, Hillsboro, Oregon 97124 (US).
- (74) Agent: **OREN, David C.**; Ked & Associates LLP, 1916 Association Drive, Reston, Virginia 20191 (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, 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.

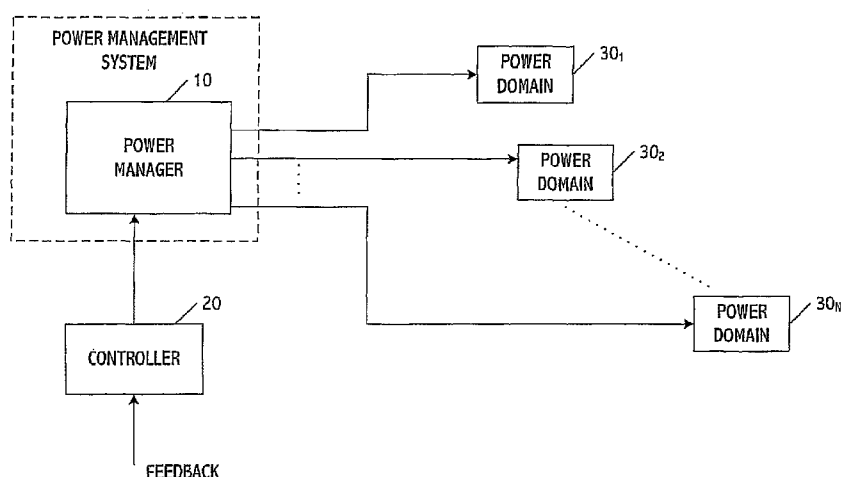
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,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

- (88) Date of publication of the international search report:
28 February 2013

(54) Title: POWER MANAGEMENT FOR AN ELECTRONIC DEVICE

**FIG. 1**

(57) **Abstract:** A control device includes a selector and a controller. The selector is to select power signals to be supplied to respective power domains of an electronic product. The controller is to compare a level of a first power signal selected by the selector to a first target level, and to generate a first setting signal to reduce a difference between the first power signal level and the first target level. The controller, selector, and power domains may be located on a same chip different from a power manager chip from which the power signals are generated or otherwise output.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/043527**A. CLASSIFICATION OF SUBJECT MATTER****G06F 1/26(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 1/26; G05B 11/01; G05F 1/10; G06F 1/32

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: power management, power domain, select, compare, power level

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0091965 A1 (ROBERT J.P. NYCHKA et al.) 17 April 2008 see paragraphs [0013]-[0028], claims 1, 10, 17-20, and figures 1-3.	1-22
A	US 2009-0201082 A1 (BRIAN SMITH et al.) 13 August 2009 see paragraphs [0023]-[0045], claim 1, and figures 1-2.	1-22
A	US 2005-0046400 A1 (EFRAIM ROTEM) 03 March 2005 see paragraphs [0012]-[0019], [0027]-[0031], claim 1, and figures 1,4.	1-22
A	US 2003-0158609 A1 (TOM CHIU) 21 August 2003 see paragraphs [0019]-[0028], claims 1, 6, and figures 1.	1-22



Further documents are listed in the continuation of Box C.



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 filing date

"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 means

"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

30 NOVEMBER 2012 (30.11.2012)

Date of mailing of the international search report

20 DECEMBER 2012 (20.12.2012)

Name and mailing address of the ISA/KR

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

Facsimile No. 82-42-472-7140

Authorized officer

HEO, Young Han

Telephone No. 82-42-481-8456



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/043527

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008-0091965 A1	17.04.2008	None	
US 2009-0201082 A1	13.08.2009	GB 0902208 D0 GB 2457171 A GB 2457171 B GB 2457171 C	25.03.2009 12.08.2009 30.06.2010 04.05.2011
US 2005-0046400 A1	03.03.2005	None	
US 2003-0158609 A1	21.08.2003	AU 2003-206000 A1 CN 1633636 A CN 1633636 C0 EP 1478995 A1 JP 2005-518043 A JP 2005-518043 T KR 10-2004-0084921 A WO 2003-071407 A1	09.09.2003 29.06.2005 29.06.2005 24.11.2004 16.06.2005 16.06.2005 06.10.2004 28.08.2003