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

(19) World Intellectual Property Organization
International Bureau

PCT

(43) International Publication Date
22 May 2008 (22.05.2008)

(10) International Publication Number
WO 2008/060418 A3

(51) **International Patent Classification:**
G05F 1/44 (2006.01)

(21) **International Application Number:**
PCT/US2007/023461

(22) **International Filing Date:**
8 November 2007 (08.11.2007)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
60/857,777 9 November 2006 (09.11.2006) US

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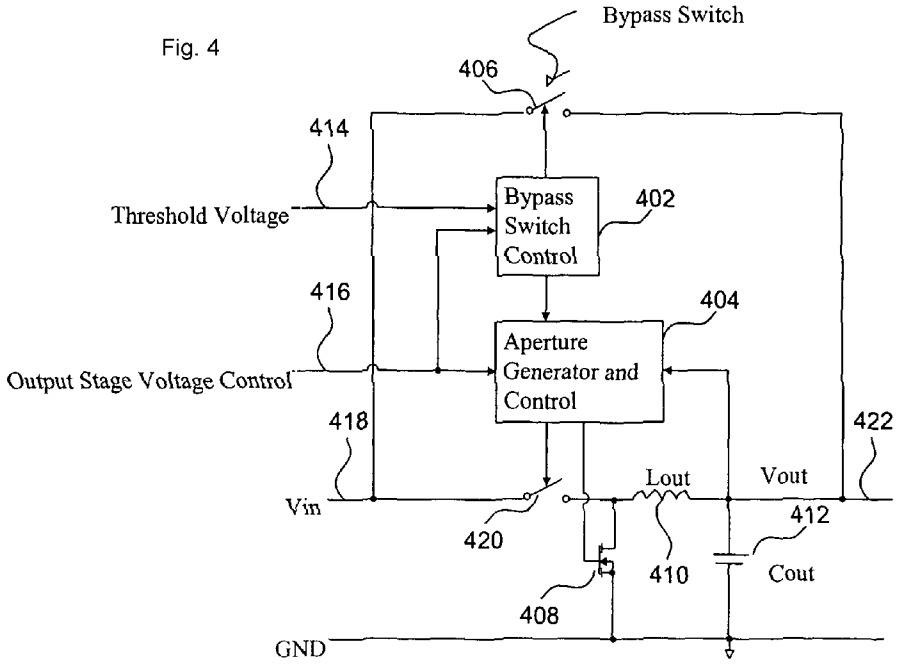
(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available):* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FT, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, 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, 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),

[Continued on next page]

(54) **Title:** SWITCHING POWER SUPPLY

Fig. 4



(57) **Abstract:** Methods and systems for enhancing system efficiency in a power amplification, modulation, and transmission system are provided. Embodiments include determining output power characteristics of a selected modulation scheme to be employed in data transmission, determining a most probable output power point of operation for the selected modulation scheme based on the output power characteristics, and controlling the output stage power supply of the system to operate at substantially optimal efficiency at the most probable output power point of operation.

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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, 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:
14 August 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/US 07/23461

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G05F 1/44 (2008.04)
USPC - 323/283
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)
IPC(8) G05F 1/44 (2008 04)
USPC 323/283

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) G05F 1/40 (2008 04)
USPC 363/21 01, 323/282, 363/21 12, 363/16

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWest (USPB, USPT, USOC, EPAB, JPAB), DialogPro, GoogleScholar, method enhancing efficiency power amplifier determining output characteristics selected modulation scheme probably point controlling stage improved distribution network statistics vector MISO GSM WCDMA CDMA EvDO EDGE OFDM bypass switch threshold noise aperture

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 2006/0001410 A1 (Ishikawa et al), 05 January 2006 (05 01 2006), Fig 6, para [0018],[0036], [0038]-[0041], [0044], [0049], [0052], [0077]-[0078], [0084], [0087]	1-28
Y	US 2005/0141251 A1 (Allwyn et al), 30 June 2005 (30 06 2005), Figs 3, 5a-6c, para [0018]-[0020], [0022], [0024]-[0026]	1-28
Y	US 2004/0203992 A1 (Yun), 14 October 2004 (14 10 2004), para [001 1]	1-17
Y	US 2006/0022656 A1 (Leung et al), 02 February 2006 (02 02 2006), para [0086], [0102], [0175]	4,27
Y	US 2005/0007083 A1 (Yang et al), 13 January 2005 (13 01 2005), Fig 5, para [0048]-[0051]	6
Y	US 2006/0104384 A1 (Sorrells et al), 18 May 2006 (18 05 2006), see Fig 51A, para [0091], [0218], [0230]-[0232], [0368], [0447], [0449], [0483]	7-8, 11-13, 24
A	US 2005/0162142 A1 (Kernahan et al), 28 July 2005 (28 07 2005), entire document	1-28

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Date of the actual completion of the international search	Date of mailing of the international search report
26 Apnl 2008 (26 04 2008)	18 JUN 2008

Name and mailing address of the ISAAJS	Authorized officer
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Form PCT/lSA/210 (second sheet) (April 2007)