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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 September 2009 (24.09.2009)

PCT

(10) International Publication Number
WO 2009/117717 A1

(51) International Patent Classification:
H04B 1/16 (2006.01)

(21) International Application Number:
PCT/US2009/037895

(22) International Filing Date:
20 March 2009 (20.03.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/038,710 21 March 2008 (21.03.2008) US
12/406,910 18 March 2009 (18.03.2009) US

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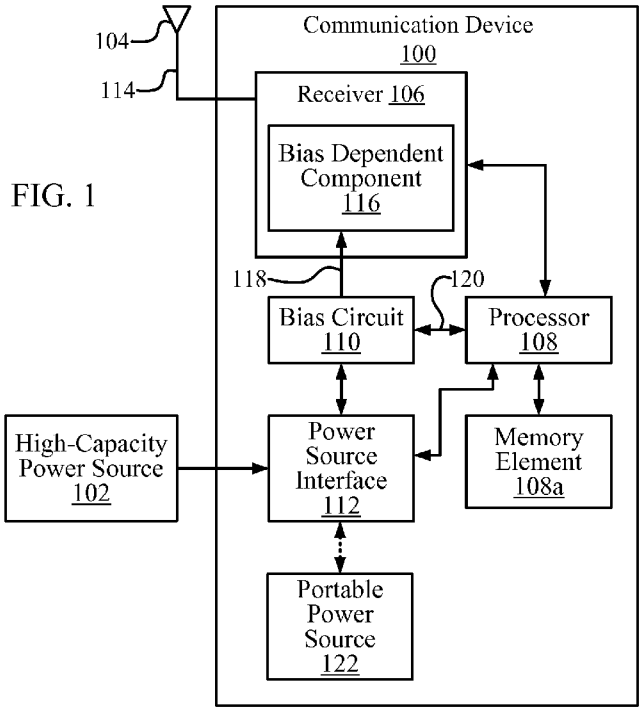
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, 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, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR),

[Continued on next page]

(54) Title: ADAPTIVE LINEARITY COMMUNICATION DEVICE

FIG. 1



(57) Abstract: An adaptive linearity communication device and its operation are disclosed. The adaptive linearity communication device may include a component having a linearity dependent upon a bias and a processor configured to change the bias in response to the detection of a connection between the wireless communication device and a high-capacity power source. A method of operating an adaptive linearity communication device having a bias dependent component where the device is configured to operate in a high efficiency mode in the absence of a connection between the device and a high-capacity power source, may include determining whether a high-capacity power source is connected to the wireless communication device, and varying the operation of the bias dependent component based on whether a high-capacity power source is connected to the wireless communication device.

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OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

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

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*