

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 February 2007 (15.02.2007)

PCT

(10) International Publication Number
WO 2007/018498 A1

(51) International Patent Classification:
H02M 3/155 (2006.01)

(21) International Application Number:
PCT/US2005/026456

(22) International Filing Date: 26 July 2005 (26.07.2005)

(25) Filing Language: English

(26) Publication Language: English

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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, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, LV, MC, 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).

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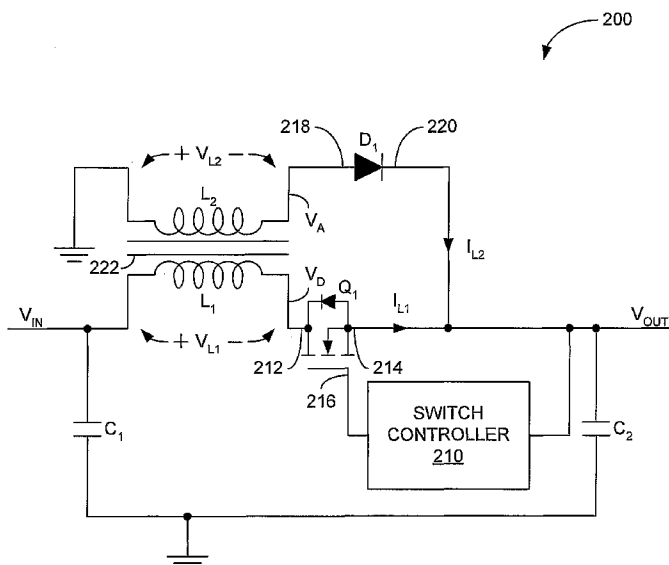
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Published:

— with international search report

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(54) Title: STEP-DOWN VOLTAGE CONVERTER



(57) Abstract: A step-down voltage converter (100) for generating an output voltage (V_{OUT}) from an input voltage (V_{IN}) is provided. The converter (100) includes a switch (111) having a first terminal (112) and a second terminal (114), wherein the second terminal (114) is electrically coupled with the output voltage (V_{OUT}). Also included is a rectifier (117) having a first terminal (118) and a second terminal (120), wherein the second terminal (120) is electrically coupled with the output voltage (V_{OUT}). A first inductor (124) electrically couples the first terminal (112) of the switch (111) with the input voltage (V_{IN}). A second inductor (126) magnetically coupled with the first inductor (124) electrically couples the first terminal (118) of the rectifier (117) with a voltage reference (128). A switch controller (110) coupled with the output voltage (V_{OUT}) is configured to control the switch (111).

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