

11/11/02
2002068302

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

(19) World Intellectual Property Organization
International Bureau



162162

(43) International Publication Date
27 December 2001 (27.12.2001)

PCT

(10) International Publication Number
WO 01/99265 A1

(51) International Patent Classification⁷: **H02M 3/158**

(21) International Application Number: PCT/US01/17840

(22) International Filing Date: 1 June 2001 (01.06.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/602,163 22 June 2000 (22.06.2000) US

(71) Applicant (for all designated States except US): **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **NGUYEN, Don** [US/US]; 3472 NW Blackcomb Drive, Portland, OR 97129 (US).

(74) Agents: **MALLIE, Michael, J.**; Blackely, Sokoloff, Taylor & Zafman, 7th Floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 et al. (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

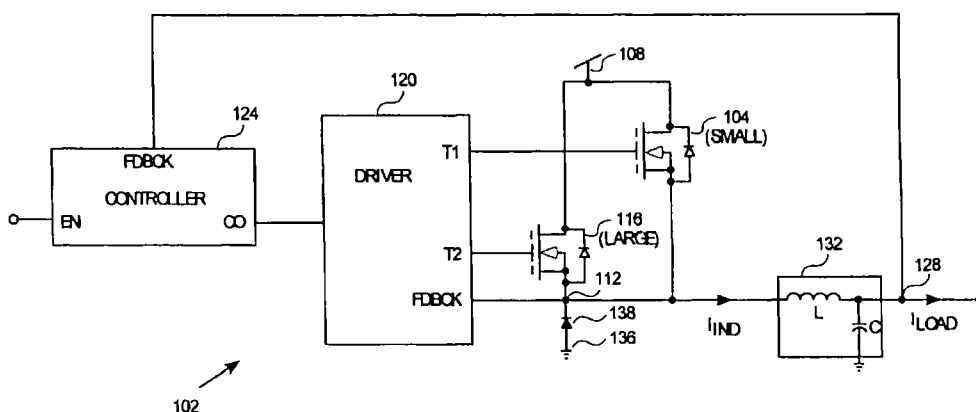
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, 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

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DUAL DRIVE BUCK REGULATOR



(57) Abstract: A switching regulator of the step down variety is disclosed. First and second transistors coupled in parallel between a first supply node and a first output node are controlled by a driver stage to sequentially (1) switch on the first transistor, (2) switch on the second transistor, (3) switch off the second transistor, and (4) switch off the first transistor. The first transistor is smaller than the second transistor, such that the first transistor can switch faster than the second transistor, thereby reducing power dissipation during the time intervals in which both transistors are switching. Such a design allows an increase in switching frequency without the conventional increase in power dissipation, in return for a relatively inexpensive change of adding an additional, smaller transistor in parallel with a larger one, and associated circuitry in the driver stage.

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