

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/057747 A1

(51) International Patent Classification⁷: **H02M 7/12**,
H02P 7/05, H02M 3/158

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(21) International Application Number:
PCT/GB2003/005384

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(22) International Filing Date:
10 December 2003 (10.12.2003)

(81) Designated States (*national*): 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, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0229873.5 21 December 2002 (21.12.2002) GB

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

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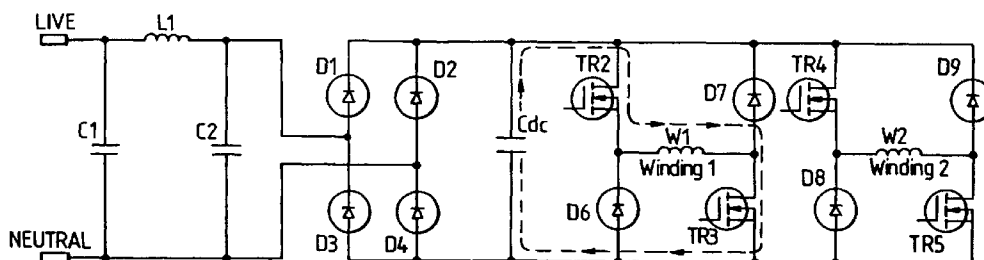
Published:

- 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

[Continued on next page]

(54) Title: POWER CONVERSION APPARATUS

STATE 1: TR2 + TR3 ON



(57) Abstract: The invention provides a power conversion apparatus for converting power from an alternating source to dc, comprising: an input stage for receiving power from the alternating source, which input stage includes an input filter (C1, C2, L1), rectifying means (D1, D2, D3, D4) for rectifying the alternating signal, a capacitor (Cdc) for storing energy from the rectified signal, an output for outputting power from the rectifying means (D1, D2, D3, D4) and the capacitor (Cdc) to the pulsed load, wherein the pulsed load has at least one switched winding (W1, W2) which receives power from the output, and wherein the capacitor (Cdc) is dimensioned such that the voltage across the capacitor (Cdc) falls below 15% of the nominal peak rectified voltage of the source during each cycle of the alternating source. A converter of this kind provides benefits in that the current drawn from the ac supply is able to fall within the limits imposed by EMC regulations, and constitutes a simpler and cheaper apparatus in comparison to known converters of a similar power rating.

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