

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 June 2007 (21.06.2007)

PCT

(10) International Publication Number
WO 2007/068072 A1

(51) International Patent Classification:
F04B 39/12 (2006.01)

(74) Agents: ARNAUD, Antonio M.P. et al.; Rua José Bonifácio, 93 - 9th floor, 01003-901 São Paulo - SP (BR).

(21) International Application Number:
PCT/BR2006/000280

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, LV, LY, MA, MD, 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.

(22) International Filing Date:
14 December 2006 (14.12.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PI0505717-5 16 December 2005 (16.12.2005) BR

(71) Applicant (for all designated States except US):
WHIRLPOOL S.A. [BR/BR]; Avenida das Nações Unidas, 12.995 - 32º andar - Brooklin Novo, 04578-000 São Paulo - SP (BR).

(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).

(72) Inventors; and

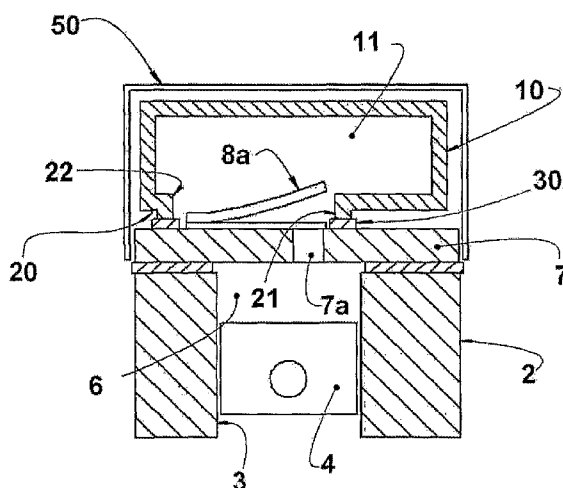
(75) Inventors/Applicants (for US only): **RIBAS JUNIOR, Fernando Antonio** [BR/BR]; Rua Otto Pfuetzenreuter, 912 - Ap. 201 - Bairro Costa e Silva, BRAZIL Joinville - SC (BR). **LINK, Rodrigo** [BR/BR]; Rua das Andorinhas, 855 - Ap. 304 - Bairro Costa e Silva, 89220-021 Joinville - SC (BR). **LILIE, Dietmar Erich Bernhard** [BR/BR]; Rua Orestes Guimarães, 904, BRAZIL Joinville - SC (BR). **TODESCAT, Márcio Luiz** [BR/BR]; Rua Alberto Schweitzer, 54, BRAZIL Joinville - SC (BR).

Published:

— with international search report

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: HERMETIC COMPRESSOR WITH INTERNAL THERMAL INSULATION



(57) Abstract: A hermetic compressor with internal thermal insulation, comprising: a compression cylinder (3) having one end closed by a valve plate (7) provided with a discharge orifice (7a) and having a front face (7c) against which is mounted a cylinder cover (5, 10) internally defining a discharge chamber (5a, 11); and a spacing duct (20) having one inlet end (21) hermetically mounted to the front face (7c) of the valve plate (7) and open to the discharge orifice (7a) and an outlet end (22) hermetically mounted to the cylinder cover (10) and open to the interior of the discharge chamber (11), said spacing duct (20) defining a hermetic fluid communication between the interior of the compression cylinder (3) and the discharge chamber (11) maintaining the cylinder cover (10) spaced from the valve plate (7) and defining, with the latter, an annular plenum around said spacing duct (20).

WO 2007/068072 A1