

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 July 2009 (23.07.2009)

PCT

(10) International Publication Number
WO 2009/091397 A1

(51) International Patent Classification:
F25B 45/00 (2006.01)

(21) International Application Number:
PCT/US2008/051303

(22) International Filing Date: 17 January 2008 (17.01.2008)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **CARRIER CORPORATION** [US/US]; One Carrier Place, Farmington, CT 06034 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ASPROVSKI, Zvonko** [US/US]; 7730 Treeline Drive, Liverpool, NY 13090 (US). **DURASAMY, Suresh** [US/US]; 4046 Plum Yew Circle, Liverpool, NY 13090 (US).

(74) Agent: **BIGELOW, Dana, F.**; 250 South Clinton Street, Suite 300, Syracuse, NY 13202 (US).

(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, 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, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

(54) Title: PRESSURE RELIEF IN HIGH PRESSURE REFRIGERATION SYSTEM

(57) Abstract: A CO₂ vapor compression system is provided with at least one pressure relief device which is designed to open when the pressure in the low pressure side exceeds the predetermined level because of exposure to high temperatures during non- operational periods. A pressure relief device is provided near the compressor suction inlet to relieve one section of the circuit and another is provided upstream of an unloading valve to relieve pressure in another section thereof.

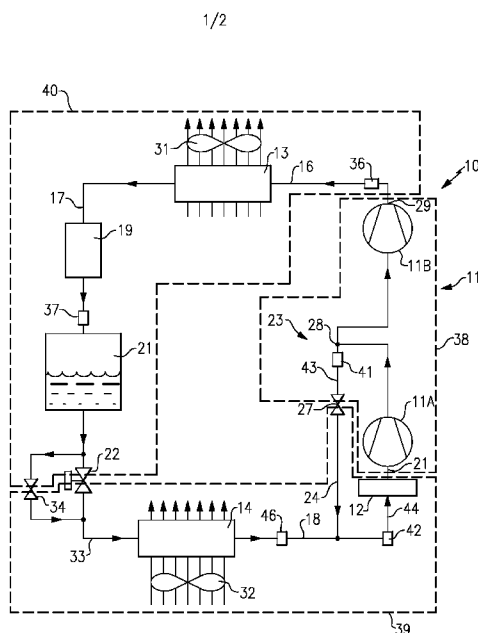


FIG.1

WO 2009/091397 A1