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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 February 2007 (01.02.2007)

PCT

(10) International Publication Number
WO 2007/012855 A1

(51) International Patent Classification:
F25B 49/00 (2006.01)

(21) International Application Number:
PCT/GB2006/002799

(22) International Filing Date: 26 July 2006 (26.07.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0515399.4 26 July 2005 (26.07.2005) GB

(71) Applicant *(for all designated States except US)*: **TROX (UK) LIMITED** [GB/GB]; Caxton Way, Thetford, Norfolk IP24 3SQ (GB).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **LEATHERBARROW, David** [GB/GB]; Trox (Uk) Limited, Caxton Way, Thetford, Norfolk IP24 3SQ (GB).

(74) Agents: **MURRAY, Elisabeth, Anne** et al.; Mathys & Squire, 120 Holborn, London EC1N 2SQ (GB).

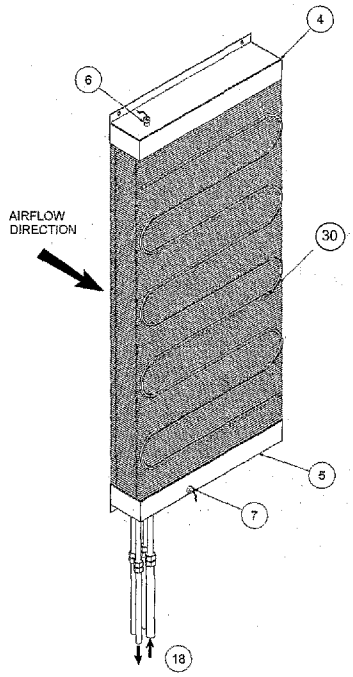
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, 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, 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).

Published:
— *with international search report*

[Continued on next page]

(54) Title: APPARATUS FOR COOLING SYSTEMS



(57) Abstract: Apparatus for detecting the escape of a fluid from a cooling system having a passage (1, 2, 3), comprises: a housing (4, 5) defining a volume abutting one or more portions of said passage; and sensor means (6, 7) adapted to detect the presence of said fluid within said volume; and wherein the housing is adapted to collect the escaped fluid such that the sensor can detect the escaped fluid before the operation of the cooling system is compromised. The passage of the cooling system may be a pipe of a heat exchange circuit, and the fluid may be a heat transfer fluid such as carbon dioxide. The apparatus may be adapted to signal to alarm means or other monitoring systems on detection of escaped fluid.

WO 2007/012855 A1

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.