

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 03/106871 A1

(51) International Patent Classification⁷: **F16K 17/38**,
31/385

[GB/GB]; 19 St Thomas Close, Sutton Coldfield, West
Midlands B75 7QJ (GB).

(21) International Application Number: PCT/GB03/02422

(74) Agents: **CROSTON, David** et al.; Withers & Rogers,
Goldings House, 2 Hays Lane, London SE1 2HW (GB).

(22) International Filing Date: 3 June 2003 (03.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0213936.8 18 June 2002 (18.06.2002) GB

(71) Applicant (for all designated States except US): **THE
LINDEN SHIELD LIMITED** [GB/GB]; 21-25 The
Crescent, Hockley, Birmingham, West Midlands BL18
5LU (GB).

(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, EC, 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, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

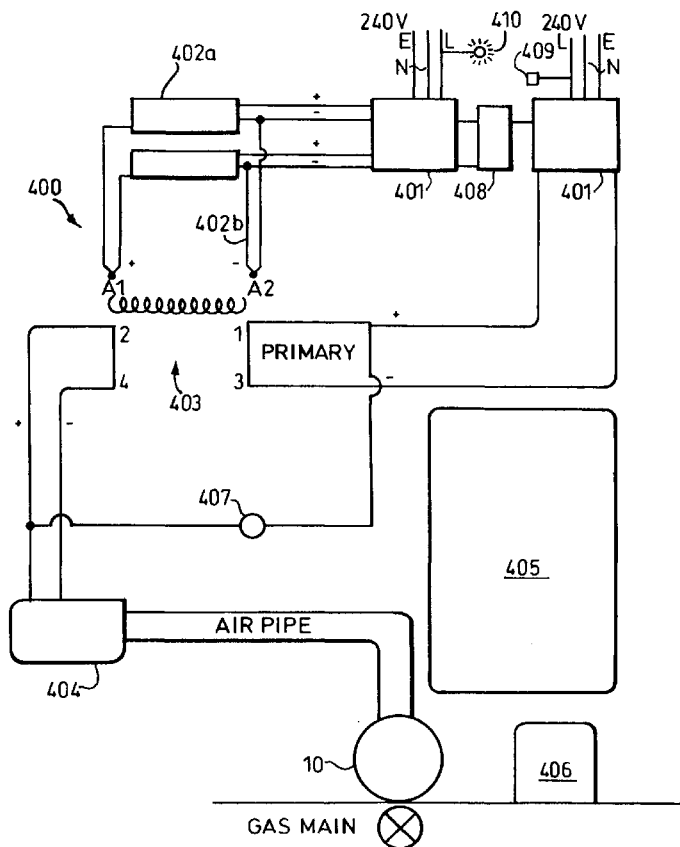
(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

(72) Inventor; and

(75) Inventor/Applicant (for US only): **LINDEN, Sean**

[Continued on next page]

(54) Title: A VALVE ASSEMBLY FOR OPENING AND CLOSING A FUEL LINE



(57) Abstract: The present invention relates to a temperature-sensitive safety valve assembly. The valve assembly comprises a first pressurised fluid region, which region has a first outlet, and a second pressurised fluid region, which region has a heat-sensitive sealing means. A valve between the first and second regions is adapted to be actuated by the pressure of a first pressurised fluid in the first region against biasing means to open the outlet. The heat-sensitive sealing means in the second region fails at high temperature so as to de-pressurise the second region, thereby actuating the valve to move under the biasing means to close the first outlet and seal the first region. The valve assembly comprises a relay unit, which is arranged to sense a parameter, and react to the sensing of the parameter by sealing the first region. The temperature-sensitive safety valve assembly is remotely electronically operable in a wireless manner. Also, the temperature-sensitive safety valve assembly has an electronic device and a solar cell arranged to supply power to the electronic device.

WO 03/106871 A1



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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.

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*