

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number
WO 2004/065869 A1

(51) International Patent Classification⁷: **F25J 1/00**, 1/02, 3/02, 3/04, 3/08, 5/00, F25B 25/02, 27/02

(74) Agent: **WRAY & ASSOCIATES**; Level 4, The Quadrant, 1 William Street, Perth, Western Australia 6000 (AU).

(21) International Application Number:
PCT/AU2003/001623

(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.

(22) International Filing Date: 4 December 2003 (04.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003900327 22 January 2003 (22.01.2003) AU

(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).

(71) Applicant (*for all designated States except US*): **LNG INTERNATIONAL PTY LTD** [AU/AU]; Level 22, Allendale Square, 77 St George's Terrace, Perth, W.A. 6000 (AU).

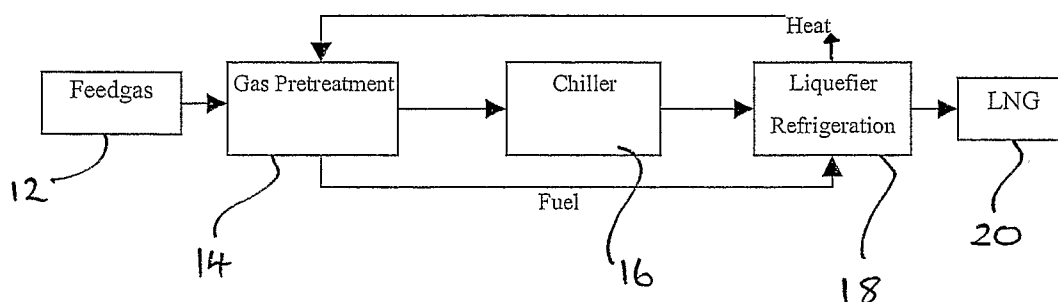
Published:
— with international search report

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **BRIDGWOOD, Paul, William** [AU/AU]; 30 Jackadder Way, Woodlands, Western Australia 6018 (AU).

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: A REFRIGERATION PROCESS AND THE PRODUCTION OF LIQUEFIED NATURAL GAS



(57) Abstract: Process and apparatus for the production of liquefied natural gas utilising a refrigeration cycle, characterised by the steps of: i) Pre-treatment of a natural gas stream; ii) Chilling of either or both of the resulting pre-treated gas stream or a refrigerant gas stream within the refrigeration cycle; and iii) Liquefaction of the natural gas.

WO 2004/065869 A1