



(11) **EP 1 867 939 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:  
**Corrected version no 1 (W1 B1)**  
**Corrections, see**  
**Bibliography INID code(s) 73**

(51) Int Cl.:  
**F25J 1/02** <sup>(2006.01)</sup> **F25J 3/00** <sup>(2006.01)</sup>  
**F25J 3/08** <sup>(2006.01)</sup> **B01D 53/52** <sup>(2006.01)</sup>  
**F28D 7/04** <sup>(2006.01)</sup> **F28F 27/02** <sup>(2006.01)</sup>  
**F25J 5/00** <sup>(2006.01)</sup>

(48) Corrigendum issued on:  
**09.08.2017 Bulletin 2017/32**

(45) Date of publication and mention  
of the grant of the patent:  
**17.05.2017 Bulletin 2017/20**

(21) Application number: **07017306.7**

(22) Date of filing: **01.07.2002**

(54) **Apparatus for the liquefaction of natural gas and methods relating to same**

Vorrichtung zur Verflüssigung von Erdgas und dazugehörige Verfahren

Appareil pour la liquéfaction de gaz naturel et son procédé

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR**  
**IE IT LI LU MC NL PT SE SK TR**

(30) Priority: **27.02.2002 US 86066**

(43) Date of publication of application:  
**19.12.2007 Bulletin 2007/51**

(62) Document number(s) of the earlier application(s) in  
accordance with Art. 76 EPC:  
**02744788.7 / 1 478 874**

(73) Proprietor: **Battelle Energy Alliance, LLC**  
**Idaho Falls, ID 83415 (US)**

(72) Inventors:  
• **Wilding, Bruce M.**  
**Idaho Falls, ID 83402 (US)**  
• **Bingham, Dennis N.**  
**Idaho Falls, ID 83402 (US)**

- **McKellar, Michael G.**  
**Idaho Falls, ID 83402 (US)**
- **Turner, Terry D.**  
**Idaho Falls, ID 83401 (US)**
- **Rateman, Kevin T.**  
**Calgary T3M 1C8 (CA)**
- **Palmer, Gary L.**  
**Shelley, ID 83274 (US)**
- **Klingler, Kerry M.**  
**Idaho Falls, ID 83402 (US)**
- **Vranicar, John J.**  
**Concord, CA 94519 (US)**

(74) Representative: **Evens, Paul Jonathan et al**  
**Maguire Boss**  
**24 East Street**  
**St. Ives, Cambridgeshire PE27 5PD (GB)**

(56) References cited:  
**US-A- 3 548 606 US-A- 4 479 533**  
**US-A- 5 419 392**

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).