

Title (en)

Coil wound heat exchanger

Title (de)

Wärmetauscher mit gewickelten Rohrschlangen

Title (fr)

Echangeur de chaleur avec serpentins de tubes

Publication

EP 1367350 B2 20121024 (EN)

Application

EP 02011583 A 20020527

Priority

EP 02011583 A 20020527

Abstract (en)

[origin: EP1367350A1] A coil wound tubing assembly for use in a coil wound heat exchanger. The tubing assembly may comprise a first coil wound tubing bundle and a second coil wound tubing bundle, wherein one or more groups of tubes in the first coil wound tubing bundle may be connected in direct fluid flow communication with one or more groups of tubes in the second coil wound tubing bundle, characterized in that the first and the second coil wound tubing bundles differ in one or more parameters selected from a group including mandrel outer diameter, spacer thickness, number of spacers, number of tubes, tubing inner diameter, tubing outer diameter, tube length, tube pitch, and tube winding angle. <IMAGE>

IPC 8 full level

F28D 7/02 (2006.01); **F25J 3/00** (2006.01); **F25J 3/02** (2006.01); **F28D 7/00** (2006.01)

CPC (source: EP)

F25J 1/0022 (2013.01); **F25J 1/0052** (2013.01); **F25J 1/0055** (2013.01); **F25J 1/0087** (2013.01); **F25J 1/0216** (2013.01); **F25J 1/0262** (2013.01);
F25J 5/002 (2013.01); **F28D 7/0066** (2013.01); **F28D 7/024** (2013.01); **F25J 2220/64** (2013.01); **F25J 2240/40** (2013.01); **F25J 2290/12** (2013.01)

Citation (opposition)

Opponent :

- US 5916260 A 19990629 - DUBAR CHRISTOPHER A T [AU]
- WO 0140725 A1 20010607 - SHELL INT RESEARCH [NL], et al
- DE 19848280 A1 20000427 - LINDE AG [DE], et al
- "FPSO LNG Plant Delivers Optimal Performance", AIR PRODUCTS-PROSPEKT, 1998
- BACH ET AL: "IGT International Liquified Natural gas Conference Proceedings", SPIRAL WOUND HEAT EXCHANGERS FOR LNG BASELOAD PLANTS, 14 May 2001 (2001-05-14), SEOUL PAPER SESSION
- AIR PRODUCTS PROSPEKT LNG TECHNOLOGY 2001, 2001
- NLNG THE MAGAZINE, vol. 1, no. 1, 2001, pages 10,11, - 31

Cited by

EP4177556A1; US2016209118A1; CN102575897A; NO346539B1; US2013098103A1; US10215485B2; AU2006275170B2; US2022196331A1; CN111964482A; CN115388675A; CN117006867A; CN109957423A; EP4166877A1; US10359228B2; WO2007014618A1; WO2023197683A1; WO2007014617A1; US8297074B2; EP2857782A1; WO2010121752A3; WO2021072082A1; US11187467B2; US11391512B2; US11859903B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1367350 A1 20031203; EP 1367350 B1 20051130; EP 1367350 B2 20121024; AT E311580 T1 20051215; DE 60207689 D1 20060105;
DE 60207689 T2 20060614; DE 60207689 T3 20130124; ES 2254555 T3 20060616; ES 2254555 T5 20130215

DOCDB simple family (application)

EP 02011583 A 20020527; AT 02011583 T 20020527; DE 60207689 T 20020527; ES 02011583 T 20020527