

Title (en)
OFFLOADING PIPELINE

Title (de)
ENTLADE-ROHRLEITUNG

Title (fr)
PIPELINE DE DÉCHARGEMENT

Publication
EP 2142839 A1 20100113 (EN)

Application
EP 08737236 A 20080430

Priority
• GB 2008050312 W 20080430
• GB 0708560 A 20070503

Abstract (en)
[origin: GB2448916A] A system for transporting low temperature fluids comprises a carrier pipe 2 and at least one inner product flow pipe 1 located within and thermally isolated from the carrier pipe 2, wherein the product pipe 1 has a greater length than the carrier pipe 2 and is incorporated into the entire length of the carrier pipe 2 by following a non-linear path, such that thermal contraction of the product pipe 1 due to a change in temperature of the product pipe 1 is accommodated by elastic geometric distortion. Preferably, the annular space between the carrier pipe 2 and the product pipe 1 is insulated by a vacuum. Preferably, the system includes spacers 11 which allow the product pipe 1 to straighten towards a more linear shape as it contracts. The product pipe 1 may be sinusoidal in its non-contracted state. Alternatively, the product pipe 1 may be helical in its non-contracted state (figures 2 and 3). The system is particularly suitable for conveying cryogenic fluids such as liquid natural gas (LNG).

IPC 8 full level
F16L 59/06 (2006.01); **F16L 9/18** (2006.01)

CPC (source: EP GB KR)
F16L 9/18 (2013.01 - KR); **F16L 59/06** (2013.01 - KR); **F16L 59/065** (2013.01 - EP GB KR); **F16L 59/141** (2013.01 - EP GB);
F17D 1/04 (2013.01 - KR); **F17D 1/082** (2013.01 - EP)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
GB 0708560 D0 20070613; **GB 2448916 A 20081105**; **GB 2448916 A9 20081126**; AU 2008247154 A1 20081113; BR PI0810999 A2 20141021; CA 2684925 A1 20081113; CN 101680593 A 20100324; EP 2142839 A1 20100113; JP 2010526256 A 20100729; KR 20100016156 A 20100212; WO 2008135780 A1 20081113

DOCDB simple family (application)
GB 0708560 A 20070503; AU 2008247154 A 20080430; BR PI0810999 A 20080430; CA 2684925 A 20080430; CN 200880014682 A 20080430; EP 08737236 A 20080430; GB 2008050312 W 20080430; JP 2010504865 A 20080430; KR 20097022937 A 20080430