

Title (en)

Method and system for subsea processing of multiphase well effluents

Title (de)

Verfahren und System zur Unterseeverarbeitung von mehrphasigen Bohrlochfluiden

Title (fr)

Procédé et système pour le traitement sous-marin d'effluents de puits à phases multiples

Publication

EP 2149673 A1 20100203 (EN)

Application

EP 08161579 A 20080731

Priority

EP 08161579 A 20080731

Abstract (en)

A method and system are disclosed for subsea processing multiphase well effluents comprising natural gas and liquid from a subsea hydrocarbon containing formation, which system (1) comprises: - a fluid separation vessel (6) which is connected to a downstream end of a multiphase well effluent transportation conduit (7); - a liquid level transmitter assembly (21,22) for monitoring the gas liquid interface (23) in the fluid separation vessel (6); - a liquid enriched fluid transportation flowline (14) connected at or near the bottom (13) of the fluid separation vessel (6) and a gas enriched fluid transportation flowline (12) connected at or near a top (11) of the fluid separation vessel (6); - a pump (17) connected to an electric motor (18); and - a fast acting variable speed drive system, which is coupled to the liquid level controller which adjusts the pump and motor speed setpoint within 2 seconds to maintain the liquid level in the vessel at a predetermined setpoint.

IPC 8 full level

E21B 43/36 (2006.01); **E21B 43/01** (2006.01)

CPC (source: EP GB US)

E21B 43/01 (2013.01 - EP GB US); **E21B 43/36** (2013.01 - EP GB US)

Citation (applicant)

US 7210530 B2 20070501 - LUSH DAVID [US], et al

Citation (search report)

- [Y] US 3391734 A 19680709 - TOWNSEND JR ROBERT D
- [Y] US 5865602 A 19990202 - NOZARI FARHAD [US]
- [A] EP 0833436 A2 19980401 - GEN ELECTRIC [US]
- [DA] US 7210530 B2 20070501 - LUSH DAVID [US], et al
- [Y] US 5486106 A 19960123 - HEHL KARL [DE]

Cited by

CN106401539A; EP2697480A4; EP3492694A1; CN110869582A; WO2016075018A1; US10844698B2

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2149673 A1 20100203; AU 2009276524 A1 20100204; AU 2009276524 B2 20130228; BR PI0916521 A2 20151110; CN 102105651 A 20110622; GB 201101265 D0 20110309; GB 2475184 A 20110511; GB 2475184 B 20111019; NO 20110309 A1 20110419; US 2011155385 A1 20110630; WO 2010014770 A1 20100204

DOCDB simple family (application)

EP 08161579 A 20080731; AU 2009276524 A 20090730; BR PI0916521 A 20090730; CN 200980129282 A 20090730; GB 201101265 A 20090730; NO 20110309 A 20110225; US 2009052186 W 20090730; US 200913056905 A 20090730