

Title (en)

FLUE GAS INJECTION FOR HEAVY OIL RECOVERY

Title (de)

RAUCHGASEINSPRITZUNG FÜR SCHWERÖLGEWINNUNG

Title (fr)

INJECTION DE GAZ EFFLUENTS POUR L'EXTRACTION DE L'HUILE LOURDE

Publication

EP 1875039 A4 20130619 (EN)

Application

EP 06705108 A 20060206

Priority

- CA 2006000152 W 20060206
- CA 2505449 A 20050427

Abstract (en)

[origin: CA2505449A1] A variety of methods for thermal recovery of natural gas and bitumen from a formation containing the latter. In general, the methods incorporate a series of existing, but previously uncombined technologies. A modified flue gas from the steam generators conventionally used in a SAGD recovery operation is injected into the formation to enhance recovery with the produced fluids, natural gas, bitumen, inter alia are further processed. The injection of the flue gas conveniently is disposed of and further acts to repressurize the formation which otherwise becomes depressurized when depleted of natural gas. Accordingly, environmental and economic advantages are realized with the methodology.

IPC 8 full level

E21B 43/24 (2006.01); **C09K 8/58** (2006.01)

CPC (source: EP GB KR)

C09K 8/58 (2013.01 - KR); **C10G 1/04** (2013.01 - EP); **E21B 41/0064** (2013.01 - EP); **E21B 43/164** (2013.01 - EP); **E21B 43/166** (2013.01 - GB); **E21B 43/168** (2013.01 - GB); **E21B 43/18** (2013.01 - EP); **E21B 43/24** (2013.01 - GB KR); **E21B 43/2408** (2013.01 - EP); **F22B 33/18** (2013.01 - EP); **Y02C 20/40** (2020.08 - EP); **Y02P 30/00** (2015.11 - EP); **Y02P 90/70** (2015.11 - EP)

Citation (search report)

- [Y] US 2003062159 A1 20030403 - NASR TAWFIK NOAMAN [CA]
- [Y] US 5040470 A 19910820 - LOFTON RUTH E [US], et al
- [A] WO 2005031136 A1 20050407 - BHP BILLITON INNOVATION PTY [AU], et al
- [A] US 6298664 B1 20011009 - AASEN KNUT INGVAR [NO], et al
- [A] AU 444113 B2 19731228
- See also references of WO 2006113982A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

CA 2505449 A1 20060207; **CA 2505449 C 20070313**; AU 2006200466 A1 20061116; AU 2006200466 B2 20100218; BR PI0607657 A2 20090922; CN 1932237 A 20070321; CN 1932237 B 20121024; DE 102006005277 A1 20061109; EA 013019 B1 20100226; EA 200602090 A1 20080630; EP 1875039 A1 20080109; EP 1875039 A4 20130619; FR 2885133 A1 20061103; FR 2885133 B1 20101231; GB 0602343 D0 20060315; GB 2425550 A 20061101; GB 2425550 B 20100602; JP 2006307160 A 20061109; KR 101280016 B1 20130701; KR 20080028354 A 20080331; MA 29441 B1 20080502; MX 2007013439 A 20080114; NO 20060582 L 20061030; NZ 545119 A 20070928; WO 2006113982 A1 20061102

DOCDB simple family (application)

CA 2505449 A 20050427; AU 2006200466 A 20060203; BR PI0607657 A 20060206; CA 2006000152 W 20060206; CN 200610008167 A 20060223; DE 102006005277 A 20060206; EA 200602090 A 20060206; EP 06705108 A 20060206; FR 0650429 A 20060207; GB 0602343 A 20060206; JP 2006030296 A 20060207; KR 20077024888 A 20060206; MA 30327 A 20071026; MX 2007013439 A 20060206; NO 20060582 A 20060206; NZ 54511906 A 20060202