

Title (en)

GAS HYDRATE CONVERSION SYSTEM FOR HARVESTING HYDROCARBON HYDRATE DEPOSITS

Title (de)

GASHYDRATUMWANDLUNGSSYSTEM FÜR DEN ABBAU VON KOHLENWASSERSTOFFHYDRATLAGERN

Title (fr)

SYSTÈME DE CONVERSION D'HYDRATE DE GAZ POUR LA RÉCOLTE DE DÉPÔTS D'HYDRATE D'HYDROCARBURE

Publication

EP 2567066 A2 20130313 (EN)

Application

EP 10858212 A 20100816

Priority

- US 23747609 P 20090827
- US 2010024499 W 20100217
- US 70765610 A 20100217
- US 2010024498 W 20100217
- US 70765310 A 20100217
- US 2010024497 W 20100217
- US 70765110 A 20100217
- US 30440310 P 20100213
- US 2010045629 W 20100816

Abstract (en)

[origin: WO2011028233A2] In one embodiment of the present invention, a system for providing a renewable source of material resources is provided comprising: a first source of renewable energy; first stream of materials from a first materials source; an electrolyzer coupled to the first source of renewable energy and the first stream of materials, wherein the electrolyzer is configured to produce a first material resource by electrolysis; a processor for further processing or use or the material resource to produce a second material resource, wherein the processor comprises a solar collector and where the solar collector is configured to provide heat to the first materials resource for disassociation; and a material resource storage coupled to the electrolyzer for receiving the material resource from the electrolyzer or providing the material resource to the processor for further processing or use.

IPC 8 full level

E21B 43/22 (2006.01); **C25B 9/17** (2021.01); **E21B 43/25** (2006.01); **F24S 20/20** (2018.01); **F24S 23/30** (2018.01); **F24S 23/71** (2018.01); **F24S 90/00** (2018.01)

CPC (source: EP KR US)

C01B 3/22 (2013.01 - EP); **C01B 3/34** (2013.01 - EP); **C01B 32/225** (2017.08 - EP); **C10L 3/108** (2013.01 - EP); **C25B 1/00** (2013.01 - EP); **C25B 1/02** (2013.01 - EP US); **C25B 1/04** (2013.01 - EP); **C25B 1/26** (2013.01 - EP); **C25B 3/00** (2013.01 - EP); **C25B 9/17** (2021.01 - EP); **C25B 11/03** (2013.01 - EP); **C25B 13/02** (2013.01 - EP); **C25B 15/00** (2013.01 - EP US); **E21C 50/00** (2013.01 - EP); **F01N 5/02** (2013.01 - EP US); **F02G 5/04** (2013.01 - EP); **F03B 13/1885** (2013.01 - EP); **F03G 3/08** (2013.01 - KR); **F03G 7/04** (2013.01 - KR); **F03G 7/05** (2013.01 - EP); **F22B 33/18** (2013.01 - KR); **F24D 11/005** (2013.01 - EP); **F24H 8/00** (2013.01 - KR); **F24S 10/40** (2018.05 - EP); **F24S 20/20** (2018.05 - EP); **F24S 23/30** (2018.05 - EP); **H01M 8/0656** (2013.01 - EP); **H01M 8/186** (2013.01 - EP); **C01B 2203/0216** (2013.01 - EP); **C01B 2203/0283** (2013.01 - EP); **C01B 2203/043** (2013.01 - EP); **C01B 2203/061** (2013.01 - EP); **C01B 2203/1241** (2013.01 - EP); **C01B 2203/84** (2013.01 - EP); **C02F 1/46104** (2013.01 - EP); **C02F 2303/10** (2013.01 - EP); **F24D 2200/26** (2013.01 - EP); **F24D 2200/29** (2013.01 - EP); **F24D 2200/30** (2013.01 - EP); **F24S 23/71** (2018.05 - EP US); **F28D 7/103** (2013.01 - EP); **Y02B 10/20** (2013.01 - EP); **Y02B 30/52** (2013.01 - EP); **Y02E 10/10** (2013.01 - EP); **Y02E 10/30** (2013.01 - EP); **Y02E 10/44** (2013.01 - EP); **Y02E 10/46** (2013.01 - EP); **Y02E 20/14** (2013.01 - EP); **Y02E 60/16** (2013.01 - KR); **Y02E 60/36** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02P 20/10** (2015.11 - EP); **Y02P 20/129** (2015.11 - EP); **Y02P 20/133** (2015.11 - EP); **Y02P 20/20** (2015.11 - EP); **Y02P 70/50** (2015.11 - EP); **Y02P 80/20** (2015.11 - EP); **Y02T 10/12** (2013.01 - EP US); **Y02W 10/30** (2015.05 - EP); **Y02W 10/33** (2015.05 - EP); **Y02W 10/37** (2015.05 - EP); **Y10T 137/0391** (2015.04 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2011028233 A2 20110310; **WO 2011028233 A3 20110623**; AU 2010289904 A1 20120223; BR 112012004093 A2 20160308; CA 2770510 A1 20110310; CN 102712020 A 20121003; CN 102712020 B 20150401; CN 102713154 A 20121003; CN 102713280 A 20121003; CN 102713280 B 20151125; CN 102713281 A 20121003; CN 102713281 B 20150819; CN 102713282 A 20121003; CN 102713282 B 20160106; CN 102884361 A 20130116; CN 102884361 B 20150415; CN 103124692 A 20130529; CN 103124692 B 20160113; CN 104848032 A 20150819; CN 104912705 A 20150916; EP 2470752 A2 20120704; EP 2470752 A4 20150805; EP 2470786 A1 20120704; EP 2470786 A4 20150304; EP 2470787 A2 20120704; EP 2470787 A4 20140416; EP 2470788 A2 20120704; EP 2470788 A4 20170405; EP 2470822 A1 20120704; EP 2470822 A4 20130731; EP 2567066 A2 20130313; EP 2567066 A4 20170208; EP 2625031 A2 20130814; EP 2625031 A4 20160608; IL 217860 A0 20120329; IL 217860 A 20160331; JP 2013503298 A 20130131; JP 2013503299 A 20130131; JP 2013503310 A 20130131; JP 2013503457 A 20130131; JP 2014025587 A 20140206; JP 2015028339 A 20150212; JP 5852576 B2 20160203; JP 5922577 B2 20160524; KR 101547007 B1 20150824; KR 20120026141 A 20120316; RU 2012111665 A 20130101; RU 2012111666 A 20130101; RU 2012111668 A 20130101; RU 2012111681 A 20130101; RU 2499949 C1 20131127; RU 2537321 C2 20150110; RU 2562336 C2 20150910; WO 2011028400 A2 20110310; WO 2011028400 A3 20130502; WO 2011028401 A2 20110310; WO 2011028401 A3 20110616; WO 2011028402 A2 20110310; WO 2011028402 A3 20110616; WO 2011034677 A2 20110324; WO 2011034677 A3 20110512; WO 2011102851 A1 20110825; WO 2012047187 A2 20120412; WO 2012047187 A3 20130328; WO 2012047188 A1 20120412; ZA 201200791 B 20130529

DOCDB simple family (application)

US 2010002260 W 20100816; AU 2010289904 A 20100816; BR 112012004093 A 20100816; CA 2770510 A 20100816; CN 201080037896 A 20100816; CN 201080048871 A 20100816; CN 201080048872 A 20100816; CN 201080048874 A 20100816; CN 201080048875 A 20100816; CN 201080048882 A 20100816; CN 201080048888 A 20100816; CN 201510098366 A 20100816; CN 201510137060 A 20100816; EP 10814155 A 20100816; EP 10814156 A 20100816; EP 10814157 A 20100816; EP 10817626 A 20100816; EP 10846282 A 20100816; EP 10855997 A 20100816; EP 10858212 A 20100816; IL 21786012 A 20120131; JP 2012526834 A 20100816; JP 2012526835 A 20100816; JP 2012526836 A 20100816; JP 2012537875 A 20100816; JP 2013181500 A 20130902; JP 2014163086 A 20140808; KR 20127004326 A 20100816; RU 2012111665 A 20100816; RU 2012111666 A 20100816; RU 2012111668 A 20100816; RU 2012111681 A 20100816; US 2010045629 W 20100816; US 2010045653 W 20100816;

US 2010045658 W 20100816; US 2010045664 W 20100816; US 2010045668 W 20100816; US 2010045669 W 20100816;
US 2010045670 W 20100816; ZA 201200791 A 20120201