

Title (en)

CARBON DIOXIDE-BASED GEOTHERMAL ENERGY GENERATION SYSTEMS AND METHODS RELATED THERETO

Title (de)

SYSTEME ZUR ERZEUGUNG GEOTHERMALER ENERGIE AUF KOHLENDIOXIDBASIS UND ENTSPRECHENDE VERFAHREN

Title (fr)

SYSTÈMES DE GÉNÉRATION D'ÉNERGIE GÉOTHERMIQUE À BASE DE DIOXYDE DE CARBONE ET PROCÉDÉS ASSOCIÉS À CEUX-CI

Publication

EP 2875089 A1 20150527 (EN)

Application

EP 13745264 A 20130719

Priority

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- US 2013051379 W 20130719

Abstract (en)

[origin: WO2014015307A1] A system comprises an injection well for accessing a reservoir containing a native fluid comprising at least one hydrocarbon, wherein the reservoir is located below one or more caprocks, is at a first temperature, and is accessible without using large-scale hydrofracturing. The system further includes a production well in fluid communication with the reservoir, a supply apparatus configured to feed a non-water based working fluid at a second temperature that is lower than the first temperature through the injection well to the reservoir, wherein the working fluid mixes with the native fluid to form a production fluid comprising at least a portion of the working fluid and at least a portion of the at least one hydrocarbon at a third temperature that is higher than the second temperature. An energy recovery apparatus is in fluid communication with the production well, wherein energy contained in the production fluid is converted to electricity, heat, or combinations thereof, in the energy recovery apparatus.

IPC 8 full level

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Citation (search report)

See references of WO 2014015307A1

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