Title (en)

CONTINUOUS MOVING BED SOLAR STEAM GENERATION SYSTEM

Title (de)

SOLAR-DAMPFERZEUGUNGSSYSTEM MIT KONTINUIERLICHEM SICH BEWEGENDEM BETT

Title (fr)

SYSTÈME DE GÉNÉRATION DE VAPEUR À L'AIDE DE L'ÉNERGIE SOLAIRE À LIT MOBILE CONTINU

Publication

EP 2289151 A2 20110302 (EN)

Application

EP 09733374 A 20090413

Priority

- US 2009040338 W 20090413
- US 4536108 P 20080416
- US 5908008 P 20080605
- US 42106009 A 20090409
- US 42104709 A 20090409

Abstract (en)

[origin: WO2009129170A2] A continuous moving bed solar steam generation and storage system is provided to generate steam for production processes after loss or reduction of received solar energy. The system includes a receiver 10 that receives a flowing stream of particulate material 30 that absorbs solar radiant energy 15 as it passes through beams of the energy 15 received from collectors 14. The heated stream of material 30 passes into a first chamber 40 to heat a tube bundle 42 therein. Heat from the particulate material 30 is transferred to the bundle 42, evaporating the water to generate, reheat (RH) and/or superheat (SH) steam 46. The cooled material 30 passes to a second chamber 60. The material 30 is drained from the second chamber 60 and carried to a cyclone 80 in the receiver 10. The material 30 drains from the cyclone 80 to complete the flow cycle.

IPC 8 full level

F03G 6/00 (2006.01); **F22B 1/00** (2006.01); **F24S 10/30** (2018.01); **F24S 20/20** (2018.01); **F24S 23/70** (2018.01)

CPC (source: EP)

F03G 6/003 (2013.01); **F22B 1/006** (2013.01); **F24S 20/20** (2018.04); F24S 2023/87 (2018.04); Y02E 10/46 (2013.01)

Citation (search report)

See references of WO 2009129170A2

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

WO 2009129170 A2 20091022; **WO 2009129170 A3 20100708**; **WO 2009129170 A8 20101118**; CN 102007294 A 20110406; EP 2289151 A2 20110302; IL 208227 A0 20101230; MA 32229 B1 20110401

DOCDB simple family (application)

US 2009040338 W 20090413; CN 200980114199 A 20090413; EP 09733374 A 20090413; IL 20822710 A 20100919; MA 33249 A 20101015