

Title (en)
SOLAR ENERGY RECEIVER

Title (de)
SOLARENERGIEEMPFÄNGER

Title (fr)
RÉCEPTEUR D'ÉNERGIE SOLAIRE

Publication
EP 2859279 A4 20160217 (EN)

Application
EP 13801204 A 20130607

Priority
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• AU 2013000609 W 20130607

Abstract (en)
[origin: WO2013181712A1] A solar energy receiver comprises a panel, having a graphite core, a substantially gas tight housing encasing the graphite core, a heat exchanger comprising heat exchanger tubing, a heat exchanger inlet and a heat exchanger outlet. The heat exchanger tubing is at least partially embedded in the graphite core, and the heat exchanger inlet and the heat exchanger outlet extend through the housing. The housing is sealed around the heat exchanger inlet and the heat exchanger outlet. A method of manufacturing a solar energy receiver comprises: a) fabricating the heat exchanger in a serpentine coil shape; b) inserting grooved planks of graphite between individual coils of the heat exchanger to form the graphite core such that the coils are encompassed in the grooves; c) inserting the graphite and heat exchanger into the housing; and d) sealing the housing and sealing openings around the inlet and outlet where they pass through the housing.

IPC 8 full level
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F24S 10/00 (2018.04 - EP US); **F24S 10/72** (2018.04 - EP US); **F24S 20/20** (2018.04 - EP US); **F24S 25/50** (2018.04 - EP US); **F24S 40/10** (2018.04 - EP US); **F24S 70/10** (2018.04 - EP US); **F24S 80/00** (2018.04 - EP US); **F24S 2023/87** (2018.04 - EP US); **F24S 2080/014** (2018.04 - EP US); **Y02E 10/40** (2013.01 - US); **Y02E 10/44** (2013.01 - EP US); **Y02E 10/47** (2013.01 - EP US)

Citation (search report)
• [I] WO 2010144841 A1 20101216 - GRAFTECH INT HOLDINGS INC [US], et al
• [A] US 2006272796 A1 20061207 - ASMUSSEN ERICK R [US], et al
• [A] WO 2012034173 A1 20120322 - GRAPHITE ENERGY N V [NL], et al
• [A] WO 2010034071 A1 20100401 - SOLFAST PTY LTD [AU], et al
• [A] US 2005051538 A1 20050310 - GUCKERT WERNER [DE], et al
• See references of WO 2013181712A1

Designated contracting state (EPC)
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