

Title (en)

NON-ORTHOGONAL SOLAR HEAT COLLECTOR AND SOLAR ENERGY COGENERATION

Title (de)

NICHTORTHOGONALER SONNENWÄRMEKOLLEKTOR UND KRAFT-WÄRME-KOPPLUNG DURCH SOLARENERGIE

Title (fr)

COLLECTEUR DE CHALEUR SOLAIRE NON ORTHOGONAL ET COGÉNÉRATION D'ÉNERGIE SOLAIRE

Publication

EP 2745058 A4 20150408 (EN)

Application

EP 12865747 A 20120817

Priority

- CA 2750315 A 20110819
- CA 2012001205 W 20120817

Abstract (en)

[origin: CA2750315A1] In one aspect, a non-orthogonal solar heat collector is provided. The non-orthogonal solar heat collector comprises: a solar heat-absorbing element, a solar heat conducting/transferring element having a closed thermal connection with said solar heat-absorbing element, a solar heat converging element for converging solar heat transferred from said solar heat conducting/transferring element, a non-orthogonal angle included between a normal line of earth surface and an axis of said solar heat conducting/transferring element is larger than 95 degrees or less than 85 degrees, and a non-orthogonal angle included between a normal line of earth surface and an axis of said solar heat converging element is larger than 95 degrees or less than 85 degrees. In another aspect, there is provided a solar energy cogeneration system. Said solar energy cogeneration system is also called a combined solar heat and power that provides solar heat and electricity to customers simultaneously and locally. The solar heat cogeneration system comprises: a non-orthogonal solar heat collector, a turbine driven by fluid pressure, a turbine shaft turning generator, a generator producing electricity through the movement of the rotor in the stator, a fluid inlet, and a fluid outlet. The pressure driven turbine is from a medium selected from a group of water, steam, air and a combination of them.

IPC 8 full level

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Citation (search report)

- [XYI] WO 2011080038 A2 20110707 - SIEMENS AG [DE], et al
- [XYI] DE 102007013430 A1 20080918 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]
- [XYI] US 2011127773 A1 20110602 - FREUND SEBASTIAN WALTER [DE], et al
- [Y] WO 2010138835 A2 20101202 - GMZ ENERGY INC [US], et al
- See references of WO 2013106901A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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