

Title (en)

CARBONISATION REACTOR FOR COMBINED GENERATION OF CONSTRUCTION MATERIAL AND ELECTRICITY BY SUNLIGHT

Title (de)

CARBONISIERUNGSREAKTOR ZUR KOMBINIERTEN ERZEUGUNG VON KONSTRUKTIONSMATERIAL UND STROM MIT HILFE VON SONNENLICHT

Title (fr)

RÉACTEUR DE CARBONISATION POUR LA PRODUCTION COMBINÉE DE MATERIAUX DE CONSTRUCTION ET D'ÉLECTRICITÉ À L'AIDE DE LA LUMIÈRE SOLAIRE

Publication

EP 3245319 A1 20171122 (DE)

Application

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Abstract (en)

[origin: WO2016113140A1] The invention describes an energy-efficient method for cogeneration of carbon fibres and electricity by means of bundled sunlight for CO₂-neutral manufacture of building materials having compressive and tensile stability. The energy efficiency comes from the principle of using bundled sunlight for directly heating the carbon fibres to be produced, this being made possible by the original PAN fibre, during oxidation and pyrolysis, turning dark and ultimately becoming the almost ideal black body. The heat produced is used, later or simultaneously to the production of fibre material, for producing electricity, in accordance with the classic combined heat and power concept, so as to boost the efficiency, already heightened by this process, of carbon fibre production and to supply energy in the high-value form of electricity.

IPC 8 full level

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CPC (source: EP KR US)

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See references of WO 2016113140A1

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