

Title (en)

SYSTEMS AND METHODS FOR IMPROVING THE PERFORMANCE OF A GAS-DRIVEN GENERATOR USING A PHASE CHANGE REFRIGERANT

Title (de)

SYSTEME UND VERFAHREN ZUR VERBESSERUNG DER LEISTUNG EINES GASBETRIEBENEN GENERATORS UNTER VERWENDUNG EINES PHASENWECHSELKÄLTEMITTELS

Title (fr)

SYSTÈMES ET PROCÉDÉS D'AMÉLIORATION DES PERFORMANCES D'UN GÉNÉRATEUR ENTRAÎNÉ PAR UN GAZ À L'AIDE D'UN RÉFRIGÉRANT À CHANGEMENT DE PHASE

Publication

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Application

EP 22829189 A 20220621

Priority

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- US 2022034421 W 20220621

Abstract (en)

[origin: WO2022271758A1] An gas-driven generator system for generating electric power from movement of a working liquid. The system includes a gas-driven generator that includes a liquid turbine system fluidically interposed between the lower end of an elongated gravitational distribution conduit and the lower ends of plural elongated buoyancy conduits. A heavy working liquid flows from the upper ends of the buoyancy conduits and is fed into the upper end of the elongated gravitational distribution conduit. Working liquid flows down the elongated gravitational distribution conduit to actuate the liquid turbine system. An injection of refrigerant gas into the working liquid in the plural elongated buoyancy conduits induces upward flow of the working liquid. The system includes a solar thermal heating system fluidically coupled to heat exchangers that transfer heat collected by the solar thermal heating system to the working liquid through a thermal transfer fluid circuit.

IPC 8 full level

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