

Title (en)

STATIONARY POWER PLANT, IN PARTICULAR A GAS POWER PLANT, FOR GENERATING ELECTRICITY

Title (de)

STATIONÄRES KRAFTWERK, INSBESONDERE GASKRAFTWERK, ZUR STROMERZEUGUNG

Title (fr)

CENTRALE STATIONNAIRE, NOTAMMENT CENTRALE AU GAZ POUR LA PRODUCTION DE COURANT ÉLECTRIQUE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2012107177A1] The invention relates to a stationary power plant, in particular a gas power plant, for generating electricity; having an internal combustion engine comprising a fuel medium inlet and an exhaust gas outlet, an exhaust gas flow of the internal combustion engine being exhausted by means of the exhaust gas outlet; having an electrical generator driven by the internal combustion engine for generating electricity, and coupled or able to be coupled to an electrical grid in order to feed the generated electricity into said grid; having a fuel medium supply connected to the fuel medium inlet; a steam circuit in which a working medium is circulated by means of a feed pump comprising a heat exchanger disposed in the exhaust gas flow, by means of which waste heat of the exhaust gas flow is transferred into the working medium for partially or completely evaporating the working medium, and further comprising a condenser in which the working medium partially or completely condenses. The invention is characterized in that a reciprocating piston expander is provided in the steam circuit, in which the working medium expands to produce mechanical work, and the reciprocating piston expander is mechanically connected to the internal combustion engine and/or the electrical generator by means of a releasable clutch.

IPC 8 full level

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Citation (search report)

See references of WO 2012107177A1

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