Title (en)

MICRO-COGENERATOR

Title (de)

MIKRO-KOGENERATOR

Title (fr)

MICRO-COPRODUCTEUR

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2022269555A1] The present invention relates to a micro-cogenerator (1) comprising: a pyrolytic gasifier (2) adapted to produce syngas (8) and biochar (9) from a renewable and sustainable energy source (6); a burner (3) adapted to receive the syngas (8) produced by said pyrolytic gasifier (2) and to generate hot combustion gases (32); a Stirling engine (4) comprising a heat exchanger (38) (the so-called "hot exchanger") fed with said hot combustion gases (32), wherein: said pyrolytic gasifier (2) comprises a reaction chamber (17) inside which said energy source (6) is gasified, and wherein said reaction chamber has truncated-cone shape and is made of a polycrystalline alumina fiber-based material comprising at least 70% by weight of polycrystalline alumina, and optionally, at least 5% by weight of silica, said material having a density preferably between 350 and 500 kg/m3.

IPC 8 full level

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