

Title (en)
POWER GENERATION USING HYDROGEN FUEL WITH ECONOMICAL CARBON DIOXIDE CAPTURE

Title (de)
ENERGIEERZEUGUNG UNTER VERWENDUNG VON WASSERSTOFFBRENNSTOFF MIT WIRTSCHAFTLICHER KOHLENDIOXIDABSCHIEDUNG

Title (fr)
PRODUCTION D'ÉNERGIE À L'AIDE DE COMBUSTIBLE À BASE D'HYDROGÈNE, À CAPTURE ÉCONOMIQUE DE DIOXYDE DE CARBONE

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EP 3579959 A4 20201216 (EN)

Application
EP 18751678 A 20180209

Priority

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- US 2018017578 W 20180209

Abstract (en)
[origin: WO2018148514A1] Systems and methods for generating power using hydrogen fuel, such as derived from natural gas, are provided. Feed materials are introduced into a compact hydrogen generator to produce carbon dioxide and hydrogen gas. Sorbent material within the compact hydrogen generator acts to absorb carbon dioxide, forming a used sorbent. The hydrogen gas is separated from the used sorbent and passed to a power generator such as a hydrogen turbine to produce power. The used sorbent is introduced into a calciner and heated to desorb carbon dioxide and form a regenerated sorbent which can be recycled to the compact hydrogen generator.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)

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