

Title (en)

METHOD AND DEVICE FOR PRODUCING POWER BY MEANS OF OXIDATION OF FUEL IN A CHEMICAL LOOP

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STROMERZEUGUNG ANHAND DER OXIDATION VON KRAFTSTOFF IN EINEM CHEMISCHEN KREISLAUF

Title (fr)

PROCÉDÉ ET DISPOSITIF DE PRODUCTION D'ÉNERGIE PAR OXYDATION D'UN COMBUSTIBLE DANS UNE BOUCLE CHIMIQUE

Publication

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Application

EP 10779026 A 20101006

Priority

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Abstract (en)

[origin: WO2011048299A1] The invention relates to a method (1) for producing power from at least one fuel (4), said method including: a step a) of oxidizing (2a) said fuel (4) by means of placing it in contact with at least one oxygen-loaded solid compound (5a) and of concomitantly reducing (2b) said solid compound; a step b) of recovering said solid compound (9), reduced in step a); an exothermic step c) of oxidizing (3b) a nonzero fraction (9a) of said solid compound, recovered in step b), by means of placing it in contact with at least one oxygen-containing gas (6); and a step d) of recovering said oxidized solid compound from step c) and using, in step a), a nonzero fraction (5a) of said oxidized solid compound (5). The heat released in step c) is at least partially recovered so as to carry out said power production, said method being characterized in that the oxygen-containing gas (6) is alternately, according to the desired power level, air or a gas including a volume concentration of oxygen between 22% and 100%.

IPC 8 full level

F23C 10/00 (2006.01)

CPC (source: EP US)

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