

Title (en)

METHOD FOR GENERATING ENERGY, IN WHICH AN ELECTROPOSITIVE METAL IS ATOMISED AND/OR SPRAYED AND IS COMBUSTED WITH A REACTION GAS, AND A DEVICE FOR CARRYING OUT SAID METHOD

Title (de)

VERFAHREN ZUR ERZEUGUNG VON ENERGIE, WOBEI EIN ELEKTROPOSITIVES METALL VERDÜST UND/ODER ZERSTÄUBT UND MIT EINEM REAKTIONSGAS VERBRANNT WIRD, SOWIE EINE VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCÉDÉ DE PRODUCTION D'ÉNERGIE, COMPRENANT L'ATOMISATION ET/OU LA PULVÉRISATION D'UN MÉTAL ÉLECTROPOSITIF ET SA COMBUSTION AVEC UN GAZ RÉACTIONNEL, AINSI QUE DISPOSITIF POUR LA MISE EN OEUVRE DE CE PROCÉDÉ

Publication

EP 3177870 A1 20170614 (DE)

Application

EP 15770465 A 20150911

Priority

- DE 102014219276 A 20140924
- EP 2015070828 W 20150911

Abstract (en)

[origin: WO2016045992A1] The invention relates to a method for generating energy, in which an electropositive metal selected from the alkali metals, the alkaline earth metals, aluminium and zinc, as well as mixtures and/or alloys thereof, is atomised and/or sprayed and is combusted with a reaction gas comprising carbon dioxide and/or water, the reacted mixture of reaction gas and electropositive metal being mixed with water and/or an aqueous solution and/or suspension of a salt of said electropositive metal. The invention also relates to a device for carrying out said method.

IPC 8 full level

F23C 9/00 (2006.01); **F01K 21/04** (2006.01); **F23C 99/00** (2006.01); **F23J 15/02** (2006.01); **F24V 30/00** (2018.01)

CPC (source: CN EP US)

F01K 3/188 (2013.01 - CN EP US); **F01K 21/04** (2013.01 - CN EP US); **F01K 23/02** (2013.01 - CN EP US); **F23C 9/00** (2013.01 - CN EP US);
F23C 99/00 (2013.01 - CN EP US); **F23J 15/022** (2013.01 - CN EP US); **F24V 30/00** (2018.04 - EP US); **F23B 2900/00003** (2013.01 - CN EP US);
F23J 2217/102 (2013.01 - CN EP US); **F23J 2217/40** (2013.01 - CN EP US); **Y02E 20/16** (2013.01 - EP US); **Y02E 20/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2016045992A1

Citation (examination)

WO 2011076994 A1 20110630 - FOSTER WHEELER ENERGIA OY [FI], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102014219276 A1 20160324; CN 107087421 A 20170822; EP 3177870 A1 20170614; US 10280805 B2 20190507;
US 2017284227 A1 20171005; WO 2016045992 A1 20160331

DOCDB simple family (application)

DE 102014219276 A 20140924; CN 201580051574 A 20150911; EP 15770465 A 20150911; EP 2015070828 W 20150911;
US 201515511270 A 20150911