

Title (en)

BIOMASS MICRON FUEL HIGH-TEMPERATURE CLEANING AND COMBUSTION METHOD BASED ON ADIABATIC COMBUSTION CONDITIONS

Title (de)

HOCHTEMPERATURREINIGUNGS- UND VERBRENNUNGSVERFAHREN VON BIOMASSE-MIKRON-BRENNSTOFF AUF DER BASIS VON ADIABATISCHEN VERBRENNUNGSBEDINGUNGEN

Title (fr)

PROCÉDÉ DE NETTOYAGE ET DE COMBUSTION HAUTE TEMPÉRATURE DE BMF (BIOMASS MICRON FUEL) BASÉ SUR DES CONDITIONS DE COMBUSTION ADIABATIQUE

Publication

EP 3222913 A4 20171206 (EN)

Application

EP 14906429 A 20141217

Priority

- CN 201410665874 A 20141119
- CN 2014094005 W 20141217

Abstract (en)

[origin: EP3222913A1] Provided is a biomass micron fuel high-temperature cleaning and combustion method based on adiabatic combustion conditions, comprising: (a) in entirely sealed form, a biomass micron fuel is filled, handled, and transported, and delivered via a pipe to an industrial furnace; (b) the biomass micron fuel is premixed with air to form a dust cloud in fluid form; (c) the premixed fluid dust cloud is sprayed, via a fuel nozzle, into the adiabatic combustion chamber (1) arranged in the furnace; the energy of the biomass fuel having a relatively low energy density is accumulated in the closed heat storage space opposite the combustion chamber, and the closed storage space performs ultra-high-temperature combustion; (d) during the process of combustion, steam is added to the adiabatic combustion chamber (1).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [A] JP 2014202448 A 20141027 - TOKUYAMA CORP
- [A] US 2009078175 A1 20090326 - EITENEER BORIS NIKOLAEVICH [US], et al
- [A] JP 2005265300 A 20050929 - ISHIKAWAJIMA HARIMA HEAVY IND
- See references of WO 2016078176A1

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