

Title (en)

METHOD AND APPARATUS FOR CASCADED BIOMASS OXIDATION WITH THERMAL FEEDBACK

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KASKADISCHEN BIOMASSE-OXIDATION MIT THERMISCHER RÜCKKOPPLUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF D'OXYDATION DE BIOMASSE EN CASCADE À RÉTROACTION THERMIQUE

Publication

**EP 2373926 A1 20111012 (DE)**

Application

**EP 09764435 A 20091124**

Priority

- AT 2009000457 W 20091124
- AT 18762008 A 20081202

Abstract (en)

[origin: CA2746826A1] The invention relates to a method for cascaded biomass oxidation in a dish burner with ejection firing. The fuel (18), together with oxygen-containing primary air, is fed to a gasifier dish (8) having high thermal conductivity, in which the fuel is gasified by pyrolysis in a first combustion step, the resulting gas is conducted through guiding devices (6, 9) over the dish edge (11) of the gasifier dish, or over recesses on the upper dish edge, to the outside wall of the dish (8), and is enriched with oxygen-containing secondary air in the intermediate chamber (10) and converted into a cyclone flow around the outer shell dish during a second combustion step, through the convection of which strong thermal feedback is created, together with the high reflection of the thermal radiation on the guiding devices.

IPC 8 full level

**F23B 80/04** (2006.01); **F23B 10/00** (2011.01); **F23B 90/00** (2011.01); **F23L 1/00** (2006.01); **F23L 9/00** (2006.01); **F23N 3/00** (2006.01)

CPC (source: EP US)

**F23B 10/00** (2013.01 - EP US); **F23B 80/04** (2013.01 - EP US); **F23B 90/00** (2013.01 - EP US); **F23L 1/00** (2013.01 - EP US); **F23L 9/00** (2013.01 - EP US); **F23N 3/00** (2013.01 - EP US); **Y02E 20/34** (2013.01 - EP US)

Citation (search report)

See references of WO 2010063046A1

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**AT 507098 A4 20100215**; **AT 507098 B1 20100215**; CA 2746826 A1 20100610; EP 2373926 A1 20111012; US 2011303132 A1 20111215; WO 2010063046 A1 20100610; WO 2010063046 A4 20100902

DOCDB simple family (application)

**AT 18762008 A 20081202**; AT 2009000457 W 20091124; CA 2746826 A 20091124; EP 09764435 A 20091124; US 200913143045 A 20091124