

Title (en)

METHOD AND DEVICE FOR ENTRAINED-FLOW SULFATION OF FLUE GAS CONSTITUENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR FLUGSTROM-SULFATIERUNG VON RAUCHGASINHALTSSTOFFEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE SULFATATION EN LIT ENTRAÎNÉ DE CONSTITUANTS DE GAZ DE FUMÉE

Publication

EP 2217354 A1 20100818 (DE)

Application

EP 08852596 A 20081024

Priority

- EP 2008008998 W 20081024
- DE 102007056580 A 20071123

Abstract (en)

[origin: CA2705043A1] The invention relates to a method for entrained-flow sulfation of flue gas constituents of a flue gas (9) containing oxygen in combustion systems having at least one combustion chamber. The aim of the invention is to develop a method for a practically complete entrained-flow sulfation of sulfatable flue gas constituents, thus allowing the formation of flue dust containing chloride to be minimized while reducing the use of sulfur oxides. Said aim is attained in that, after passing through an exhaust gas burnout zone, the flue gas constituents are conducted through a reaction chamber (22) in which the flue gas reaches a reaction temperature between 700 and 900 °C over a dwell time of 4 to 20 s, wherein the sulfatable flue gas constituents are transitioned (24) while flowing through into solid ash particles containing sulfate with the SO₂/SO₃ present in the exhaust gas and the halide concentration in the flue ash is reduced.

IPC 8 full level

B01D 53/68 (2006.01); **F23G 5/48** (2006.01)

CPC (source: EP US)

B01D 53/64 (2013.01 - EP US); **B01D 53/68** (2013.01 - EP US); **F23G 5/027** (2013.01 - EP US); **F23G 5/48** (2013.01 - EP US);
F23G 7/065 (2013.01 - EP US); **F23J 15/06** (2013.01 - EP US); **F23J 15/08** (2013.01 - EP US); **B01D 2251/508** (2013.01 - EP US);
B01D 2251/602 (2013.01 - EP US); **B01D 2257/204** (2013.01 - EP US); **F23G 2206/203** (2013.01 - EP US); **F23G 2209/26** (2013.01 - EP US);
F23J 2215/20 (2013.01 - EP US); **F23J 2217/104** (2013.01 - EP US); **F23J 2219/20** (2013.01 - EP US); **Y02E 20/12** (2013.01 - EP US);
Y02E 20/30 (2013.01 - EP US)

Citation (search report)

See references of WO 2009065481A1

Citation (examination)

EP 0193205 A2 19860903 - KELLOGG M W CO [US]

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102007056580 B3 20090402; CA 2705043 A1 20090528; EP 2217354 A1 20100818; JP 2011504412 A 20110210; JP 5743547 B2 20150701;
US 2010260654 A1 20101014; US 8084006 B2 20111227; WO 2009065481 A1 20090528

DOCDB simple family (application)

DE 102007056580 A 20071123; CA 2705043 A 20081024; EP 08852596 A 20081024; EP 2008008998 W 20081024;
JP 2010534386 A 20081024; US 74392808 A 20081024