

Title (en)

LOCAL IMPROVEMENT OF THE MIXTURE OF AIR AND FUEL IN BURNERS COMPRISING SWIRL GENERATORS HAVING BLADE ENDS THAT ARE CROSSED IN THE OUTER REGION

Title (de)

LOKALE VERBESSERUNG DER MISCHUNG VON LUFT UND BRENNSTOFF IN BRENNERN MIT DRALLERZEUGERN MIT IM AUSSENBEREICH VERSCHRÄNKTEN SCHAUFELENDEN

Title (fr)

AMÉLIORATION LOCALE DU MÉLANGE D'AIR ET DE COMBUSTIBLE DANS DES BRÛLEURS POURVUS DE GÉNÉRATEURS DE TOURBILLON COMPRENANT DES EXTRÉMITÉS À AUBE ENTRECROISÉES DANS LA ZONE EXTÉRIEURE

Publication

EP 2864706 B1 20161102 (DE)

Application

EP 13729697 A 20130613

Priority

- DE 102012213853 A 20120806
- EP 2013062248 W 20130613

Abstract (en)

[origin: WO2014023462A1] The invention relates to a burner (1), comprising an air supply and premix channel (4) having an essentially annular cross-section, through which air and fuel flow during operation, and which is formed of an outer shell (5) and a hub (6). A plurality of swirl blades (7), which extend from the hub (6) to the outer shell (7) in a radial direction and are provided with a deflection surface (11), are arranged in said burner. In a radial outer region of the swirl blades (7), a downstream flow angle (α) to a main flow direction (13) increases at least once and decreases at least once in a radial direction at an outflow end (12) of the deflection surface (11).

IPC 8 full level

F23R 3/14 (2006.01); **F23R 3/28** (2006.01)

CPC (source: EP KR RU US)

F23R 3/14 (2013.01 - EP KR US); **F23R 3/286** (2013.01 - EP KR US); **F23C 2900/07001** (2013.01 - EP KR US); **F23D 14/46** (2013.01 - RU); **F23R 3/14** (2013.01 - RU)

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

DOCDB simple family (publication)

WO 2014023462 A1 20140213; CN 104471317 A 20150325; CN 104471317 B 20160907; EP 2864706 A1 20150429; EP 2864706 B1 20161102; KR 20150039763 A 20150413; RU 2015107562 A 20160927; RU 2633475 C2 20171012; US 10012386 B2 20180703; US 2015285499 A1 20151008

DOCDB simple family (application)

EP 2013062248 W 20130613; CN 201380037149 A 20130613; EP 13729697 A 20130613; KR 20157002878 A 20130613; RU 2015107562 A 20130613; US 201314420204 A 20130613