

Title (en)

Low nox staged fuel injection burner for creating plug flow

Title (de)

Einspritzbrenner mit niedrigen NOx-Werten zur Erzeugung einer Pfropfenströmung

Title (fr)

Brûleur à injection de carburant étagée à faible NOx pour la création d'un écoulement piston

Publication

EP 1916477 A2 20080430 (EN)

Application

EP 07118635 A 20071017

Priority

US 58547306 A 20061024

Abstract (en)

A burner for producing a plug-like flow and low NOx emissions. The burner has a central air jet and plural staged fuel jets surrounding the central jet. The ratio of the sum of the momentums of vector components of the staged jets along respective axes parallel to the central longitudinal axis of the central jet to the momentum of the central jet along that axis is within the range of 0.5 to 1.5 and most preferably 0.8.

IPC 8 full level

F23D 14/22 (2006.01); **F23D 14/48** (2006.01); **F23D 14/58** (2006.01); **F23D 23/00** (2006.01)

CPC (source: EP US)

F23C 6/045 (2013.01 - EP US); **F23D 14/22** (2013.01 - EP US); **F23D 14/48** (2013.01 - EP US); **F23D 14/58** (2013.01 - EP US); **F23D 23/00** (2013.01 - EP US); **F23C 2201/20** (2013.01 - EP US); **F23C 2900/06043** (2013.01 - EP US); **F23D 2900/14003** (2013.01 - EP US)

Cited by

DE102012108817A1; EP3078908A1; US10551058B2; US11460188B2; US10359213B2; US11415316B2; US10386062B2; US10808927B2; WO2019123783A1; WO2018236762A1; US11906160B2; US10823401B2; EP3074695B1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

EP 1916477 A2 20080430; **EP 1916477 A3 20090708**; CA 2608039 A1 20080424; CN 101182922 A 20080521; SG 142253 A1 20080528; US 2008096146 A1 20080424

DOCDB simple family (application)

EP 07118635 A 20071017; CA 2608039 A 20071017; CN 200710192984 A 20071023; SG 2007169188 A 20071015; US 58547306 A 20061024