

Title (en)
Combustion apparatus with premixing element

Title (de)
Verbrennungsvorrichtung mit vormischendem Element

Title (fr)
Appareil de combustion avec élément de prémélange

Publication
EP 2696140 A3 20171108 (EN)

Application
EP 12196852 A 20121213

Priority
KR 20120086479 A 20120807

Abstract (en)
[origin: EP2696140A2] Combustion apparatus (1) for reducing generation of NO_x by securing more time for mixing fuel and air and uniformly mixing fuel and air and including a modifying part (100) configured in the center to modify supplied hydrocarbon-based fuel and air and discharge high temperature modified gas including hydrogen to an outlet (101) and a supply part (200) configured at an outer side of the outlet (101) to jet fuel and air to one side of the modified gas discharged from the modifying part (100) to form a flame at a position spaced apart by a pre-set distance from the outlet (101).

IPC 8 full level
F23D 14/64 (2006.01); **F23C 99/00** (2006.01); **F23D 14/22** (2006.01); **F23D 14/68** (2006.01); **F23D 14/70** (2006.01); **F23D 14/84** (2006.01)

CPC (source: EP KR US)
F23C 99/001 (2013.01 - EP US); **F23D 14/22** (2013.01 - EP KR US); **F23D 14/28** (2013.01 - KR); **F23D 14/48** (2013.01 - KR); **F23D 14/64** (2013.01 - EP US); **F23D 14/68** (2013.01 - US); **F23D 14/70** (2013.01 - EP US); **F23D 14/84** (2013.01 - EP US); **F23C 2201/20** (2013.01 - EP US); **F23C 2900/9901** (2013.01 - EP US); **F23D 2900/00008** (2013.01 - EP US)

Citation (search report)

- [X] KR 101050511 B1 20110720 - KORE INST MACH & AMP MATERIALS [KR]
- [A] US 2009238728 A1 20090924 - KIM KWAN-TAE [KR], et al
- [A] US 2009071158 A1 20090319 - CAZALENS MICHEL PIERRE [FR], et al

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2696140 A2 20140212; **EP 2696140 A3 20171108**; **EP 2696140 B1 20200902**; CN 103574600 A 20140212; CN 103574600 B 20160309; ES 2830039 T3 20210602; JP 2014035182 A 20140224; JP 5435381 B2 20140305; KR 101284290 B1 20130708; US 2014045128 A1 20140213

DOCDB simple family (application)
EP 12196852 A 20121213; CN 201210573140 A 20121226; ES 12196852 T 20121213; JP 2012272938 A 20121214; KR 20120086479 A 20120807; US 201213714521 A 20121214