

Title (en)  
COMBUSTION CHAMBER CAPABLE OF FORCIBLY RETURNING FLAME

Title (de)  
BRENNKAMMER MIT ERZWUNGENER UMKEHRUNG

Title (fr)  
CHAMBRE DE COMBUSTION CAPABLE DE RENVOYER DE FORCE UNE FLAMME

Publication  
**EP 3124861 A4 20171122 (EN)**

Application  
**EP 14795537 A 20140404**

Priority

- CN 201410121259 A 20140328
- CN 2014000371 W 20140404

Abstract (en)  
[origin: US2016265766A1] Burners, such as all kinds of fuel oil, gas and powdered coal, have combustion chambers for stabilizing combustion and air distribution. The invention discloses a forced reversal combustion chamber, which has a combustion chamber body, configured as a hollow cavity a plurality of swirl vanes for delivering combustion air into the combustion chamber, correspondingly provided on interior side of flame outlet end of the combustion chamber; in the middle of inner end of the combustion chamber, a fuel nozzle is provided, which inserts into interior wall of the combustion chamber and outlet of which extends through the interior wall of the combustion chamber; outlet end of the combustion chamber after mixing air and fuel is flame outlet. The forced reversal combustion chamber of the invention can provide good flame stabilization, high burn-off rate of fuel and good environmental protection property.

IPC 8 full level  
**F23C 3/00** (2006.01); **F23C 7/00** (2006.01); **F23C 7/02** (2006.01); **F23D 11/40** (2006.01); **F23D 14/24** (2006.01)

CPC (source: EP RU US)  
**F23C 3/00** (2013.01 - EP US); **F23C 7/004** (2013.01 - EP US); **F23C 7/02** (2013.01 - EP US); **F23D 11/40** (2013.01 - EP US); **F23D 14/24** (2013.01 - EP US); **F23C 3/00** (2013.01 - RU); **F23C 2900/03006** (2013.01 - EP US); **F23D 11/40** (2013.01 - RU); **F23D 14/24** (2013.01 - RU)

Citation (search report)

- [X] US 4431403 A 19840214 - NOWAK LEONARD G [US], et al
- [X] GB 639483 A 19500628 - POWER JETS RES & DEV LTD
- [A] US 5193346 A 19930316 - KUWATA MASAYOSHI [US], et al
- See references of WO 2015143582A1

Cited by  
CN112361331A

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)  
**US 2016265766 A1 20160915**; CN 103851623 A 20140611; CN 103851623 B 20170315; EP 3124861 A1 20170201; EP 3124861 A4 20171122; IN 9354DEN2014 A 20150717; RU 2014144080 A 20160527; RU 2612694 C2 20170313; WO 2015143582 A1 20151001

DOCDB simple family (application)  
**US 201414400883 A 20140404**; CN 2014000371 W 20140404; CN 201410121259 A 20140328; EP 14795537 A 20140404; IN 9354DEN2014 A 20141107; RU 2014144080 A 20140404