

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 A1 20170201 (EN)

Application
EP 14795537 A 20140404

Priority

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- CN 2014000371 W 20140404

Abstract (en)

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 (3), which comprises a combustion chamber body, configured as a hollow cavity which is similar to a arcing shape formed by folding fingers towards palm and symmetrically configured around center of palm; a plurality of swirl vanes for delivering combustion air into the combustion chamber (3), correspondingly provided on interior side of flame outlet end of the combustion chamber (3); in the middle of inner end of the combustion chamber (3), a fuel nozzle (2) is provided, which inserts into interior wall of the combustion chamber (3) and outlet of which extends through the interior wall of the combustion chamber (3); outlet end of the combustion chamber (3) after mixing air and fuel is flame outlet. The forced reversal combustion chamber (3) of the invention could overcome defects in the prior art, such as bad flame stabilization, low burn-off rate of fuel and poor environmental protection property, and achieve advantages of good flame stabilization, high burn-off rate of fuel and good environmental protection property.

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