

Title (en)  
Combustible gas-air mixing device

Title (de)  
Brenngas-Luft-Mischvorrichtung

Title (fr)  
Dispositif de mélange air-gaz combustible

Publication  
**EP 2664849 A2 20131120 (DE)**

Application  
**EP 13166357 A 20130503**

Priority  
DE 102012009628 A 20120515

Abstract (en)  
The mixing device has a mixing nozzle (1), particularly a Venturi nozzle, which has two air ducts (2,3) with a gas supply (4,5) in each case for guiding the air, and a closure unit (6), which comprises a flap (9). The closure unit is formed such that the flap closes the latter air duct or latter gas supply in a closed position during operation with low air mass flow rates. The air speed in the area of the latter gas supply in the transition area between low air mass flow rates and high air mass flow rates is so low that no enrichment of the combustion gas-air mixture takes place. An independent claim is included for a method for operating a mixing device.

Abstract (de)  
Die Erfindung betrifft eine Mischvorrichtung zum Mischen von Brenngas und Luft in einem definierten Mischungsverhältnis, auf der Basis einer Venturidüse. In einem Luftkanal ist eine Klappe vorgesehen. Mit zunehmender Luftgeschwindigkeit wird die Klappe geöffnet. Ein Verriegelungsmittel verhindert, dass die Klappe im Übergangsbereich teilweise geöffnet ist.

IPC 8 full level  
**F23D 14/62** (2006.01); **F23D 14/60** (2006.01); **F23L 13/02** (2006.01); **F23N 1/02** (2006.01); **F23N 3/02** (2006.01)

CPC (source: EP)  
**F23D 14/60** (2013.01); **F23D 14/62** (2013.01); **F23L 13/02** (2013.01); **F23N 1/027** (2013.01); **F23N 3/02** (2013.01)

Citation (applicant)  
• DE 19635974 A1 19980312 - STIEBEL ELTRON GMBH & CO KG [DE]  
• EP 1183483 B1 20040303 - HONEYWELL BV [NL]  
• WO 2012007823 A1 20120119 - GAS POINT S R L [IT], et al

Cited by  
EP3662989A4; CN105378382A; CN106907356A; CN106662323A; US11143399B2; EP2918912A3; WO2015187290A1; WO2015191540A1; US9879699B2; US10724550B2; US9746176B2; US10161627B2; EP4056897A1; WO2022189413A1

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Designated extension state (EPC)  
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DOCDB simple family (publication)  
**EP 2664849 A2 20131120**; **EP 2664849 A3 20170315**; **EP 2664849 B1 20181121**; DE 102012009628 A1 20131121; ES 2711877 T3 20190508; TR 201902325 T4 20190321

DOCDB simple family (application)  
**EP 13166357 A 20130503**; DE 102012009628 A 20120515; ES 13166357 T 20130503; TR 201902325 T 20130503