

Title (en)
DEVICE FOR BURNING FUEL

Title (de)
EINRICHTUNG ZUR BRENNSTOFFVERBRENNUNG

Title (fr)
INSTALLATION DE COMBUSTION DE COMBUSTIBLE

Publication
EP 2864700 A2 20150429 (DE)

Application
EP 13776542 A 20130604

Priority
• RU 2012125946 A 20120621
• IB 2013001160 W 20130604

Abstract (en)
[origin: WO2013190352A2] The invention relates to firing technology and can be used in the burning of hydrocarbon fuel in gas turbine plants, gas-steam plants, boilers, and other thermal plants. The fuel and the air enter the combustion chamber through a fuel-air inlet port. The fuel can be supplied by injecting the liquid or gaseous fuel by means of a nozzle. The fuel-air mixture arises in the inlet port. When the fuel-air mixture tangentially enters the combustion chamber from the inlet port, the swirl occurs in the combustion chamber, and the swirl burns out. The combustion residues are caused to rotate because of the arrangement of the inlet port tangential to the combustion chamber. The hollow cone is oriented and arranged with the tip thereof toward the combustion chamber and contributes to the formation of a swirl angle of the combustion residues. A confusor increases the flow resistance, and consequently the pressure in the combustion chamber increases. This leads to an increase in the speed of the chemical reactions and a temperature increase of the combustion residues.

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Citation (search report)
See references of WO 2013190352A2

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