

Title (en)

METHOD FOR PREPARING OXIDISER FOR FUEL COMBUSTION

Title (de)

VERFAHREN ZUR HESTELLUNG VON OXIDATIONSMITTEL ZUR BRENNSTOFFVERBRENNUNG

Title (fr)

DISPOSITIF DE PREPARATION D'UN COMBURANT OPERANT LA COMBUSTION DE COMBUSTIBLE

Publication

EP 1515088 A4 20080528 (EN)

Application

EP 03730995 A 20030526

Priority

- UA 0300018 W 20030526
- UA 2002054421 A 20020530

Abstract (en)

[origin: EP1515088A1] The discovery relates to heat-and-power engineering, and can be used for fuel combustion. The objective of the invention is to save energy and protect the environment. The purpose of the invention is to develop such an oxydiser preparation device for fuel combustion, which could intensify the fuel combustion process as much as possible, while reducing the quantity of the air feed and the quantity of waste gases. The problem is solved in that the device comprises a grid electrode, electrically insulated from the walls of the oxydiser pipeline, and in addition the grid electrode is fitted with electric charge exhausters, which are preferably 60-120 mm. long, the blunt ends of which are firmly fastened to the intersection units of the longitudinal and transverse conductors of the grid, while the pointed ends are orientated in the direction of movement of the oxydiser flow. <??>Such a construction makes it possible to increase the efficiency of the heating units and reduce the air consumption and the amount of harmful substances ejected into the atmosphere. In addition, the nearer the device presented is positioned to the fuel combustion location, the greater the effect of its operation will be. The intensification of the fuel combustion process, due to a more intensive ionisation of the oxydiser resulting from the use of the device presented, makes it possible to reduce the fuel expenditure in the thermal power station boiler installations by a mean value of 0.5-1.5% and in the thermal electric power station boiler installations by 2.5-3%, to increase the efficiency of the thermal power station heating units by 0.5-1.0%, and of the thermal electric power station heating units of industrial installations and industrial boiler units by 2.0-3.0%, and to reduce the gross ejection of harmful substances into the atmosphere by a mean of 8-12%. <IMAGE>

IPC 8 full level

F23C 7/00 (2006.01); **F23C 99/00** (2006.01)

CPC (source: EP)

F23C 99/001 (2013.01); **F23L 2900/00001** (2013.01)

Citation (search report)

- [Y] DE 3303541 A1 19840809 - MESSINGER BERNHARD
- [Y] US 4850188 A 19890725 - TESTONE ANTHONY Q [US]
- See references of WO 03102469A1

Designated contracting state (EPC)

BG GR SK

DOCDB simple family (publication)

EP 1515088 A1 20050316; **EP 1515088 A4 20080528**; AU 2003242190 A1 20031219; CA 2487902 A1 20031211; EA 005632 B1 20050428; EA 200400098 A1 20041230; HU P0500214 A2 20050628; UA 52845 C2 20030115; WO 03102469 A1 20031211

DOCDB simple family (application)

EP 03730995 A 20030526; AU 2003242190 A 20030526; CA 2487902 A 20030526; EA 200400098 A 20030526; HU P0500214 A 20030526; UA 0300018 W 20030526; UA 2002054421 A 20020530