

Title (en)

LIQUID SPRAYING ARRANGEMENT, IN PARTICULAR HEATING OIL BURNER

Title (de)

ZERSTÄUBUNGSEINRICHTUNG FÜR FLÜSSIGKEITEN, INSBESONDERE HEIZÖL-BRENNER

Title (fr)

DISPOSITIF DE PULVERISATION DE LIQUIDES, NOTAMMENT BRULEUR A MAZOUT

Publication

EP 0713571 A1 19960529 (DE)

Application

EP 94925438 A 19940808

Priority

- DE 4327456 A 19930816
- EP 9402622 W 19940808

Abstract (en)

[origin: WO9505560A1] A spraying arrangement has a nozzle (1), a spraying gas supply means (11) and a liquid supply means (13) to the nozzle (1) in which the spraying gas and the liquid may be mixed before leaving the nozzle. In addition, a body (3) is centrally arranged in the axis of the nozzle (1), narrowing the cross section of the nozzle (1) in the area of the nozzle neck (15) to a ring-shaped space. The points (4) of the teeth of an element shaped as a hollow cone and having a saw-toothed end lie on the outer wall of the spreading body (3). The outer wall of the crown (2) lies on the inner wall of the nozzle neck (15), creating an inner ring-shaped space through which liquid is supplied between the spreading body (3) and the crown (2), as well as an outer ring-shaped space through which the spraying gas is supplied between the spreading body (3) and the inner wall of the nozzle (1). This low-priced, technically simple modification allows the liquid and spraying gas to be intensively mixed even at a low spraying gas pressure. A quasi-stoichiometric combustion with a reduced nitrogen oxide emission is achieved without causing the flames to touch the walls of the furnace.

IPC 1-7

F23D 11/10; B05B 7/06

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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