

Title (en)

PULVERIZED FUEL BURNER NOZZLE TIP AND SPLITTER PLATE THEREFOR

Publication

EP 0129001 B1 19880615 (EN)

Application

EP 84102001 A 19840225

Priority

US 48755283 A 19830422

Abstract (en)

[origin: EP0129001A1] An improved nozzle tip (30) which provides enhanced ignition and stabilization of pulverized fuel flames in furnaces operating at low load. The nozzle tip (30) comprises open-ended inner and outer shells (32, 34) mounted to the fuel delivery pipe (12) and defining a flow passageway within the inner shell through which the pulverized fuel is directed into the furnace and an annular flow passageway (50) between the inner and outer shells through which additional air is directed into the furnace. A pair of diverging splitter plates (41, 42) are disposed within the inner shell (32) so as to divide the flow passageway therethrough into two separate, diverging subpassages (52, 54) so that the pulverised fuel stream discharging from the fuel delivery pipe is split into first and second streams (60, 70) which pass from the nozzle tip (30) into the furnace in a diverging manner thereby establishing an ignition stabilizing pocket in the low pressure zone (80) created between the diverging fuel streams.

IPC 1-7

F23D 1/00

IPC 8 full level

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CPC (source: EP KR)

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Cited by

EP0723113A3; CN1110645C; FR2689211A1; EP0650013A1; EP2623862A3; EP2515039A4; US10281142B2; EP3279562A4; WO9427086A1; US10591154B2; US10458645B2; US9869469B2; US10677457B2

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EP 84102001 A 19840225; AU 2711584 A 19840419; CA 449335 A 19840309; DE 3472154 T 19840225; ES 531781 A 19840418; IN 139CA1984 A 19840225; JP 7673384 A 19840418; KR 84002119 A 19840421; MX 20067584 A 19840315; ZA 841738 A 19840308