

Title (en)

HYBRID BURNER FOR PREMIX OPERATION WITH GAS AND/OR OIL, PARTICULARLY FOR GAS TURBINE PLANTS

Publication

EP 0276696 A3 19890405 (DE)

Application

EP 88100461 A 19880114

Priority

DE 3702181 A 19870126

Abstract (en)

[origin: EP0276696B1] 1. Burner for operation with gas (G) and/or oil (O), comprising a central pilot burner system (1, 2, 3, 5, 6) which can be operated with gas and/or oil as a diffusion burner or as a separate pre-mixing burner, wherein there may be the additional possibility of feeding inert substances (I); further comprising a main burner system (4, 7) surrounding the pilot burner system (1, 2, 3, 5, 6), said main burner system having an air-supply-annular channel system (4), and in this a swirl vane assembly (7) with a plurality of vanes, for pre-mixing operation with gas (GH) which can be admixed with the main air flow (LH) from a plurality of gas nozzles (11), characterised in that inlet nozzles (14) for oil (OH) are additionally present in the main burner system (4, 7) in the vicinity of the swirl vane assembly (7) and make possible the premixing of the main air flow (LH) with oil (OH).

IPC 1-7

F23D 17/00; F23D 14/02; F23C 7/00; F23L 7/00

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

[AD] EP 0193838 A2 19860910 - KRAFTWERK UNION AG [DE]

Cited by

DE102009038848A1; EP2264370A1; DE102010027808A1; DE102009038845A1; EP1614963A1; CN101922714A; CN102859282A;
DE19610930A1; US5412602A; EP0728989A3; US5365738A; CN102388270A; EP0656512A1; EP0393484A1; US5101633A; US5451160A;
DE4212810B4; US6003297A; DE4000446A1; US5066221A; DE102009038845A8; US9057524B2; EP2230458A1; EP2270398A1; WO9313359A1;
WO9400718A1; EP1645807A1; WO2011023669A1; US8020387B2; WO2011128179A1; WO2011023648A2; EP2295861A1; DE102013201232A1;
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