

Title (en)
Premix burner

Title (de)
Vormischbrenner

Title (fr)
Brûleur à prémélange

Publication
EP 0619457 B1 19971008 (DE)

Application
EP 94103873 A 19940314

Priority
CH 108293 A 19930408

Abstract (en)
[origin: EP0619457A1] A premix burner in accordance with the double-cone principle consists essentially of two hollow conical partial bodies (111, 112) fitted into each other in the flow direction, the respective centre axes (113, 114) of which are offset relative to one another. The adjacent walls of the two partial bodies form in their longitudinal extent tangential gaps (20) for the combustion air. Gas inflow openings (117) distributed in the longitudinal direction are provided in the walls of the two partial bodies. The air is guided in the tangential gaps (20) over turbulence generators (9), of which a plurality are arranged next to one another over the gap. The fuel is introduced into the gaps (20) in the immediate vicinity of the turbulence generators (9). With the new static mixer constituted by the 3-dimensional turbulence generators, it is possible to generate in the throughflow inlet gap longitudinal vortices without recirculation areas. It is thus possible to obtain extremely short mixing sections at the entrance to the burner with a simultaneously small pressure loss. <IMAGE>

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F23C 7/00; **F23D 17/00**; **F15D 1/00**; **B01F 5/04**

IPC 8 full level
F23D 14/24 (2006.01); **B01F 5/04** (2006.01); **B01F 5/06** (2006.01); **F15D 1/00** (2006.01); **F23C 7/00** (2006.01); **F23D 14/62** (2006.01); **F23D 17/00** (2006.01); **F23D 23/00** (2006.01); **F23M 9/02** (2006.01)

CPC (source: EP US)
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WO2021197654A1; RU2632749C1; US5918465A; DE19548851A1; DE19542521A1; DE19527453A1; DE19527453B4; GB2288010A; GB2288010B; DE19512645A1; EP0675322A3; CN104696959A; CN115362333A; DE19737997A1; US6055813A; EP0913630A1; US6059565A; EP0753339A3; EP0718561A3; EP3889506A1; EP0687860A3; DE19507088A1; DE19507088B4; EP0730121A3; US11208717B2; WO9717574A1; WO9623981A1; US8302404B2; US9718745B2; WO2007096294A1

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