

Title (en)
BURNER FOR A BOILER USING SOLID FUEL

Publication
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Application
EP 87116709 A 19871112

Priority
DE 8630875 U 19861118

Abstract (en)
[origin: EP0268208A2] 1. Burner (100) for a solid fuel-fired boiler (40) with a heat exchanger for the heating of water and with a fuel storage space (41) and a combustion chamber (42) disposed therebelow separated by the burner, in which the burner (100) is comprised of a burner firing block (20) horizontally arranged in the boiler (40) with a perforation (21; 121) interconnecting the fuel storage space (41) with the combustion chamber (42) in order to form a gasification zone, and a blower (50) supplies primary air to the fuel storage space (41) and secondary air to the burner (100) within the area of the perforation (21; 121) in a controlled manner, in which the perforation (21; 121) possesses a circular cross-section with radii (R1) which decrease in size from the fuel storage space in the direction of the combustion chamber (42), characterized in that the perforation (21; 121), in order to decelerate the combustible gases, in its effective cross-section from the fuel storage space (41) in the direction of the combustion chamber (42), is constructed so as to increase in size, while in the perforation (21; 121), the truncated cone (30; 130) is disposed while forming an annular gap (31; 131) between the truncated cone surface (32; 132) and the inner area (22; 122) of the perforation (21; 121), in which the radii (R1) of the circular cross section of the perforation (21; 121) decrease more substantially in size from the fuel storage space (41) in the direction of the combustion chamber (42).

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CPC (source: EP)
F23B 5/04 (2013.01); **F23B 7/005** (2013.01); **F23B 90/06** (2013.01)

Citation (search report)
• [X] CH 234066 A 19440915 - EICH ERNST [CH]
• [A] US 4598649 A 19860708 - ESHLEMAN ROGER D [US]
• [A] FR 1016208 A 19521105 - MORVAN ETS
• [A] FR 2558241 A1 19850719 - TABEL RENE [FR]

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