

Title (en)
SHAFTLESS AIR HEATER

Title (de)
WELLENLOSER LUFTERHITZER

Title (fr)
UNITÉ DE CHAUFFAGE D'AIR SANS COLONNE

Publication
EP 4023774 A4 20231011 (EN)

Application
EP 21826662 A 20210615

Priority
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Abstract (en)
[origin: EP4023774A1] What is claimed is a shaftless air heater, which comprises a burner system located at the top of a pre-chamber (1) with a chamber for mixing gas and air. The prechamber (1) has a shell (2) with a lining, inside of which an annular channel is provided, the channel being bounded by an inside annular wall (3) and by an outside annular wall (4), thereby forming a gas collector (12). The lining of the pre-chamber (1) is supported on a metal annular beam (5), one wall of which represents a continuation of the shell (2), while the other wall forms a shell (7) of a dome-like combustion chamber (6), and the base thereof forms the support of the pre-chamber (1). The combustion chamber (6) with the shell (7) and a lining (8) is arranged under and coaxially with the pre-chamber (1). The metal annular beam (5) is permanently joined with the shells (2) and (7) and is provided with a base plate (9) from above, thus forming an air collector (10). The outside annular wall (4) has an opening with a branch pipe (18) for supplying gas. Outlet gas openings (13) are arranged in rows in the top portion of the inside annular wall (3), and air openings (14) are located in the bottom portion of the inside annular wall (3). The invention provides for increased operational safety and reliability due to an increased stability and durability of the shaftless air heater.

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Citation (search report)
• [A] US 2010323314 A1 20101223 - KALUGIN YAKOV [RU]
• [A] CN 209495326 U 20191015 - ZHENGZHOU YUXING HOT BLAST STOVE TECH CO LTD
• [A] CN 207062313 U 20180302 - MCC CAPITAL ENG & RES INC LTD
• See references of WO 2021256966A1

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