

Title (en)

BURNER FOR COMBUSTION OF GASEOUS FUELS IN SHAFT FURNACE, ESPECIALLY FOR HEAT PROCESSING OF MINERALS IN GRANULAR FORM

Title (de)

BRENNER FÜR DIE VERBRENNUNG VON GASFÖRMIGEN BRENNSTOFFEN IN EINEM SCHACHTOFEN, INSBESONDERE FÜR WÄRMEBEHANDLUNG VON MINERALIEN IN GRANULIERTER FORM

Title (fr)

BRÛLEUR POUR LA COMBUSTION DES COMBUSTIBLES GAZEUX DANS UN FOUR À CUVE, EN PARTICULIER POUR LE TRAITEMENT DE MINÉRAUX SOUS FORME GRANULÉE

Publication

EP 3719397 B1 20230920 (EN)

Application

EP 20167863 A 20200402

Priority

SK 500272019 U 20190403

Abstract (en)

[origin: EP3719397A1] The burner is placed inside the burner chamber (1) in a sheath of the shaft furnace and it has a supply pipe (2), which is connected to the source of the gaseous fuel. The burner includes a separation insert (4). The nozzle (3) of the burner is inside the separation insert (4). The second end (9) of the separation insert (4) reaches to the edge zone where the burner chamber (1) is connected to the inside of the shaft furnace. The outer dimension of the separation insert (4) is less than inner dimension of the burner chamber (1). The combustion air enters the inside of the separation insert (4) where it mixes up with the gaseous fuel and subsequently burns, combusts. The nozzle (3) of the burner is placed outside the edge zone; usually it will be placed more than 100 mm, preferably more than 250 mm, from the inner edge of the burner chamber (1). The edge of the burner chamber (1) is protected against the overheating and in the sintering zone of the shaft surface a more homogenous temperature profile is achieved, thanks to which the number of undesired conglomerates and unburned charge is minimalized.

IPC 8 full level

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CPC (source: EP RU)

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