Title (en)

TUBULAR ROTARY FURNACE WITH COMBUSTION AIR BLOWN-IN RADIALLY THROUGH THE LINING

Publication

EP 0385098 B1 19931013 (EN)

Application

EP 90101366 A 19900124

Priority

IT 6520189 A 19890303

Abstract (en)

[origin: EP0385098A2] Tubular rotary furnace specifically designed for equiflow or counterflow combustion or solid, semisolid and other waste consisting of a cylindrical shell (1) rotating around a slightly inclined (2 DEG - 3 DEG) longitudinal (X-X) axis with respect to the horizontal plane. The furnace lining is consisting of hollow quoin-shaped refractory solid (2) or hollow (3) bricks, of which the latter are creating anular chambers (14, 15, 16) which by means of holes (11) drilled in the shell (1) and valves (12) are communicating with external combustion air inlet pipes; These hollow bricks (3) feature strongly inclined channels (17, 18) through which the air coming from the anular chamber (14,15,16) enters the furnace above and below the fuel bed . A special distributor (20a, 20b) at the head of the furnace permits to blow a proper amount of primary air into the various furnaces zones (S1, S2, S3), only through the refractory bricks covered by the material to be incinerated. An additional dosis of air may be let into the refractory bricks (3) lining the furnace zone in which combustion gases are collected, thus allowing for proper secondary combustion and total dissociation of the waste gases.

IPC 1-7

F23G 5/20; F23M 5/02; F27B 7/36

IPC 8 full level

F23G 5/20 (2006.01); **F23M 5/02** (2006.01); **F27B 7/36** (2006.01)

CPC (source: EP)

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