

Title (en)

JUNCTION DEVICE BETWEEN A ROTARY KILN AND PLANETARY COOLERS

Publication

EP 0015349 B1 19831005 (FR)

Application

EP 79400153 A 19790308

Priority

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Abstract (en)

[origin: EP0015349A1] 1. Joining device between a cooling tube (2) and an inclined rotary furnace (1) for firing a granular material, around which a plurality of cooling tubes (2) are arranged as satellites, which have axes parallel to that of the furnace (1) and which are rotating integrally with it, each tube (2) being linked to the interior of the furnace (1) by means of a connecting pipe (3) connected tangentially, on the front side in the direction of rotation, to the upper end of the tube, this being closed by a wall (5) inclined relative to the axis of the tube (2) in the downstream direction of advance of the material and intersecting the wall of the tube (2) along an edge of intersection (51) which winds spirally round the axis of the tube (2) up to a point K offset angularly downstream, characterized in that the closing wall (5) has the form of a portion of a cylinder of revolution, the generating lines of which are parallel to the upstream part of the contour of the outflow orifice (32) of the connecting pipe (3) at the point I of contact between the pipe (3) and the tube (2), in such a way that the edge of intersection (51) coincides over a certain distance with the said upstream part of the outflow orifice (32), and in that, in the discharge zone, the closing wall (5) forms together with the wall of the tube (2) a channel (54), the bottom of which consists of the said spiral edge (51) and in which the material accumulates at the start of its discharge, to form a protective cushion, the said channel (54) having, in a section through a plane transverse to the axis of the tube (2), the form of a V opening underneath the outflow orifice (32) of the connecting pipe (34), the closing wall (5) being directed in such a way as to become inclined downwards during the rotation of the tube after discharge of the material.

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