

Title (en)
DEVICE FOR HEATING ELECTRICALLY CONDUCTIVE BULK MATERIALS

Publication
EP 0092036 B1 19890524 (DE)

Application
EP 83101537 A 19830218

Priority
DE 3214472 A 19820420

Abstract (en)
[origin: US4624003A] An apparatus for electrically heating conductive bulk materials by resistance Joule effect heating includes end and side walls defining an oven chamber having an inlet and an outlet. A plurality of pairs of generally planar electrode plates are angularly mounted with respect to the opposed end walls of the chamber and are electrically disconnected from one another. The electrode plates mounted to each end wall are disposed at the same angle and are arranged such that the upper edge of each electrode plate is at a different distance from the end wall than the lower edge of the plate, so that the planes of the plurality of electrode plates mounted to each end wall are substantially parallel and vertically displaced from each other. The electrical supply for each pair of electrodes plates is electrically isolated from that of each other pair. The amount of energy supplied to each pair of electrode plates is adjustable. The electrode plates may be provided with current conductor bars projecting from the planar surface of the bars into the bulk material. The extent to which the conductor bars extend into the material may be adjustable. A rotatable bulk material distributing plate may be provided at the chamber inlet. The chamber outlet may include a plurality of emptying apertures each provided with outlet cones.

IPC 1-7
F27D 11/04; **H05B 3/60**

IPC 8 full level
F27D 11/04 (2006.01); **H05B 3/60** (2006.01)

CPC (source: EP US)
H05B 3/60 (2013.01 - EP US)

Cited by
FR2626430A1; DE102013220501A1; DE4304217A1; US5694413A; CN1065407C

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EP 0092036 A2 19831026; **EP 0092036 A3 19840404**; **EP 0092036 B1 19890524**; AU 1197383 A 19831027; AU 561441 B2 19870507; BR 8301906 A 19831220; CA 1226889 A 19870915; DE 3214472 A1 19831027; DE 3214472 C2 19930114; DE 3379932 D1 19890629; JP S58192282 A 19831109; US 4624003 A 19861118

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