

Title (en)

Multi-stage particulate material dryer having channelized discharge.

Title (de)

Mehrstufentrockner für körniges Material mit kanalisierter Abführung.

Title (fr)

Séchoir à étages multiples pour matière granuleuse comportant un dispositif d'évacuation canalisé.

Publication

EP 0068734 A2 19830105 (EN)

Application

EP 82303149 A 19820617

Priority

- US 27531281 A 19810619
- US 27531381 A 19810619

Abstract (en)

A gravity-flow grain dryer (10) for particulate material comprises first and second generally vertical drying columns (68, 100) spaced apart to provide a plenum chamber (112) therebetween, the drying columns each having opposed spaced perforate walls (26, 70, 108, 110). First and second inputs (32, 72, 90, 96) are provided for introducing particulate material into top portions of the first and second drying columns (68, 100), respectively. First and second discharge means (82, 84, 124, 126) are also provided for removing particulate material from bottom portions of the first and second drying columns (68, 100), respectively. The first discharge means (82, 84) includes a dividing wall (76) which extends between the perforate walls (26, 70) for dividing at least a portion of the column into at least two channels (78, 80), both of the channels containing a discharging mechanism (82, 84) for removing particulate material from the channel. A first discharge mechanism (84) is associated with a first of the channels (80) and a second discharge mechanism (62) is associated with a second of the channels (78), the first channel (80) being adjacent the first perforate wall (70) and the first discharge mechanism (84) is adapted to discharge particulate material at a rate faster than the second discharge mechanism (82). Conveyor means (90) is provided for receiving the particulate material discharged from the first drying column (68) and for conveying the particulate material to the second input (96). A flow of drying air is directed to the plenum chamber (112), whereby the drying air passes into the first and second drying columns (68, 100) to dry the particulate material, the drying air being subsequently discharged from the drying column.

IPC 1-7

F26B 17/12; **F26B 25/00**

IPC 8 full level

F26B 17/12 (2006.01); **F26B 25/00** (2006.01)

CPC (source: EP)

F26B 17/122 (2013.01); **F26B 25/002** (2013.01)

Cited by

CN113280610A; CN109095017A; CN106679393A; GB2338286A; GB2338286B; AU2004274520B2; AU2010100952B4; AU2004274520C1; AU582301B2; WO2005028977A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0206069 A2 19861230; **EP 0206069 A3 19870225**; AR 226984 A1 19820831; AU 565672 B2 19870924; AU 582301 B2 19890316; AU 7055187 A 19870709; AU 8470282 A 19821223; BR 8203554 A 19830607; CA 1176053 A 19841016; DE 3278292 D1 19880505; DK 259682 A 19821220; DK 468988 A 19880819; DK 468988 D0 19880819; EP 0068734 A2 19830105; EP 0068734 A3 19840912; EP 0068734 B1 19880330; GR 76498 B 19840810; HU 189147 B 19860630; HU T35834 A 19850729; NZ 200681 A 19870306

DOCDB simple family (application)

EP 86107817 A 19820617; AR 28970582 A 19820617; AU 7055187 A 19870324; AU 8470282 A 19820609; BR 8203554 A 19820617; CA 405450 A 19820618; DE 3278292 T 19820617; DK 259682 A 19820610; DK 468988 A 19880819; EP 82303149 A 19820617; GR 820168412 A 19820611; HU 200182 A 19820618; NZ 20068182 A 19820519