

Title (en)

PROCESS AND APPARATUS FOR DRYING A LIQUID LAYER DEPOSITED ONTO A MOVING CARRIER MATERIAL

Publication

EP 0341646 B1 19920415 (DE)

Application

EP 89108281 A 19890509

Priority

- DE 3816414 A 19880513
- DE 3900957 A 19890114

Abstract (en)

[origin: EP0341646A2] An apparatus for drying a liquid layer deposited on a carrier material which is moved through a drying zone, which liquid layer contains evaporable solvent components and non-evaporable components, comprises a drying apparatus (1) with a drying channel (2), through which the carrier material band (4) runs in the longitudinal direction, on which band the liquid layer to be dried is deposited. The drying channel has a gas/air permeable channel covering surface (7), through which a gas flow, in particular a heated air flow, flows into the drying channel. The channel covering surface (7) is inclined in relation to the channel bottom surface (3) which runs horizontally. The drying channel (2) is adjoined by a gas exchange chamber (15) which contains a fan (12), the fan outlet (16) of which is directed towards a heat exchanger in a partition wall (10) between the gas exchange chamber (15) and a drying chamber (5) situated above the drying channel (2). The gas exchange chamber (15) contains a choke device (13 and 14 respectively) in its bottom surface (18) and in its upper gas inlet (19) respectively. The drying apparatus (1) further contains an exhausting fan (9) which is arranged above the covering surface of a through-channel (20) and is connected to the through-channel via a suction opening. In the outlet (11) of the exhausting fan (9) there is also a choke device (8). <IMAGE>

IPC 1-7

F26B 13/10; F26B 21/12

IPC 8 full level

B05C 9/14 (2006.01); **B05D 3/02** (2006.01); **B05D 3/04** (2006.01); **F26B 3/02** (2006.01); **F26B 13/10** (2006.01); **F26B 21/00** (2006.01); **F26B 21/12** (2006.01)

CPC (source: EP KR US)

B05C 9/14 (2013.01 - KR); **F26B 13/10** (2013.01 - EP KR US); **F26B 21/004** (2013.01 - EP US); **F26B 21/12** (2013.01 - EP US)

Cited by

DE4236299C2; CN112414071A; WO9319337A3; TWI493070B

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0341646 A2 19891115; EP 0341646 A3 19900502; EP 0341646 B1 19920415; AU 3472589 A 19891116; AU 624817 B2 19920625; BR 8902224 A 19900102; CA 1336533 C 19950808; DE 58901137 D1 19920521; ES 2030935 T3 19921116; FI 892292 A0 19890511; FI 892292 A 19891114; JP 3013044 B2 20000228; JP H0217966 A 19900122; KR 0135080 B1 19980615; KR 890017515 A 19891216; US 4999927 A 19910319

DOCDB simple family (application)

EP 89108281 A 19890509; AU 3472589 A 19890510; BR 8902224 A 19890512; CA 599057 A 19890509; DE 58901137 T 19890509; ES 89108281 T 19890509; FI 892292 A 19890511; JP 11885089 A 19890515; KR 890006218 A 19890510; US 34922789 A 19890509