

Title (en)  
Method and feeder for increasing efficiency of the expanding and drying process of organic plant materials, particularly in a jet drier and a feeder for use in the method

Title (de)  
Verfahren zur Erhöhung des Wirkungsgrades eines Quellungs- und Trocknungsprozesses von organischen Pflanzenmaterialien, insbesondere im Stahltrockner und Dosiereinrichtung zur Verwendung in dem Verfahren

Title (fr)  
Procédé d'augmentation de l'efficacité du procédé d'expansion et de séchage des matières végétales organiques, particulièrement dans un sécheur à courant utilisé pour des matières végétales organiques comminutées, et alimentateur pour l'utilisation dans le procédé

Publication  
**EP 2042045 B1 20121205 (EN)**

Application  
**EP 08164389 A 20080916**

Priority  
PL 38341307 A 20070924

Abstract (en)  
[origin: EP2042045A1] The invention relates to a method and a feeder for increasing the efficiency of the expanding and drying process of organic plant materials, particularly in a jet dryer used for comminuted organic plant materials, particularly tobacco materials. The dryer works with the use of a gaseous expanding and/or drying agent under an absolute working pressure in the range from 2.5 kPa to 10 MPa. Preferably, overheated steam is used as the gaseous working, expanding and/or drying agent, and during transporting the material (1) from the feeding zone (6) to the zone (9) of the contact with the expanding and/or drying agent, a feeder, preferably a rotary vane feeder (4) is flushed, preferably in a continuous manner, with a gaseous medium (11, 12) which is capable of absorbing moisture, under an absolute pressure from 2.5 kPa to 10 MPa, the temperature of the gaseous medium (11, 12), preferably air, is from 50 to 200°C, and residues of the process gas are removed from the rotary vane feeder (4). Openings (5, 7) are formed in the housing of the feeder according to the invention, delivering the gaseous medium to the moving spaces between the vanes (3), as well as openings (5A, 7A) leading out the gaseous medium from the moving spaces between the vanes (3), the openings (5, 7, 5A, 7A) being arranged respectively in the walls of the housing of the feeder (4).

IPC 8 full level  
**A24B 3/04** (2006.01); **A24B 3/18** (2006.01); **F26B 17/10** (2006.01)

CPC (source: EP US)  
**A24B 3/04** (2013.01 - EP US); **A24B 3/182** (2013.01 - EP US); **F26B 17/103** (2013.01 - EP US); **F26B 2200/22** (2013.01 - EP US)

Citation (examination)  
EP 1997393 A2 20081203 - INT TOBACCO MACHINERY POLAND [PL]

Cited by  
EP2481301A1; CN102613682A; ITTV20110009A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 2042045 A1 20090401**; **EP 2042045 B1 20121205**; CN 101396168 A 20090401; CN 101396168 B 20130313; JP 2009159944 A 20090723; JP 5355011 B2 20131127; PL 211482 B1 20120531; PL 383413 A1 20090330; US 2009090374 A1 20090409

DOCDB simple family (application)  
**EP 08164389 A 20080916**; CN 200810165760 A 20080923; JP 2008244313 A 20080924; PL 38341307 A 20070924; US 20967308 A 20080912