

Title (en)

A CAPSULE FILLING MACHINE

Title (de)

KAPSELFÜLLMASCHINE

Title (fr)

MACHINE DE REMPLISSAGE DE CAPSULES

Publication

EP 1553910 A1 20050720 (EN)

Application

EP 03784408 A 20030804

Priority

- IB 0303566 W 20030804
- IT BO20020525 A 20020808

Abstract (en)

[origin: WO2004014286A1] A capsule filling machine (10) for the production of hard gelatin capsules (C) of the type with a capsule lid and a capsule body (13, 14) containing pharmaceutical micro-tablets (12) comprises a first rotary carrousel (2) supporting a plurality of slide units (3) for picking up and handling capsules (C) in order to open then close the capsules (C) by separating then joining the capsule lids (13) and the capsule bodies (14); a second carrousel (4), which rotates in such a way that it is synchronized with the first carrousel (2), having a plurality of reciprocating doser means (21)" moving between a first operating position in which the doser means (21) are designed to pick up particulate material (12) from a tank (11) containing the material which is attached to the machine (10) and a second operating position in which they release the material into the capsule (C) bodies (14). The doser means (21) each comprise a hollow nozzle (22) with a plurality of seats (25) on its edge for picking up and holding the particulate pharmaceutical material (12), each seat (25) communicating with pneumatic means (24,24a,24b), the pneumatic means (24,24a,24b) comprising pneumatic vacuum means (24a) which, in the first operating position, suck up and hold individual particles (12) of the material in respective seats (25) of the nozzle (22), and pressurised pneumatic means (24b) which generate a flow that discharges the particles (12) from the seats (25) in the second operating position to release the material into the capsule (C) bodies (14).

IPC 1-7

A61J 3/07; B65B 35/06

IPC 8 full level

A61J 3/07 (2006.01); A61K 9/48 (2006.01); A61K 47/42 (2006.01); B65B 35/06 (2006.01); B65B 37/16 (2006.01)

CPC (source: EP KR US)

A61J 3/074 (2013.01 - EP KR US); B65B 35/06 (2013.01 - EP KR US); B65B 37/14 (2013.01 - KR); B65B 37/16 (2013.01 - EP US)

Citation (search report)

See references of WO 2004014286A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004014286 A1 20040219; AT E391483 T1 20080415; AU 2003250486 A1 20040225; BR 0305676 A 20041019;
CN 100404014 C 20080723; CN 1674854 A 20050928; DE 60320289 D1 20080521; DE 60320289 T2 20090716; EP 1553910 A1 20050720;
EP 1553910 B1 20080409; ES 2304540 T3 20081016; IT BO20020525 A1 20040209; JP 2005535375 A 20051124;
KR 20050027273 A 20050318; US 2006064943 A1 20060330

DOCDB simple family (application)

IB 0303566 W 20030804; AT 03784408 T 20030804; AU 2003250486 A 20030804; BR 0305676 A 20030804; CN 03818886 A 20030804;
DE 60320289 T 20030804; EP 03784408 A 20030804; ES 03784408 T 20030804; IT BO20020525 A 20020808; JP 2004527220 A 20030804;
KR 20057001841 A 20050201; US 52340805 A 20050203