

Title (en)

FILLING PUNCH STATION AND METHOD FOR FILLING CAPSULES IN A FILLING PUNCH STATION

Title (de)

STOPFSTEMPELSTATION UND VERFAHREN ZUM FÜLLEN VON KAPSELN IN EINER STOPFSTEMPELSTATION

Title (fr)

STATION À TIGE-POUSOIR ET PROCÉDÉ DE REMPLISSAGE DE CAPSULE DANS UNE STATION À TIGE-POUSOIR

Publication

EP 2886099 B1 20160720 (DE)

Application

EP 14199660 A 20141222

Priority

DE 102013114693 A 20131220

Abstract (en)

[origin: CN104721053A] A tamping punch station for filling capsules in a capsule filling machine is described. The machine includes a rotatably drivable dosing disk with bore holes and a filling device for filling the bore holes. Tamping punches and ejection punches are held on a punch support, and vertical movement of the punch support causes the tamping punches to press filling material into the bore holes and the ejection punches to eject pellets created by the tamping punches in the bore holes. First drive means rotates the dosing disk along punches and second drive means moves the punch support. The second drive means comprises at least two spindle drives acting on the punch support with respectively one spindle nut and respectively one vertical drive spindle guided in the spindle nut and at least two drive motors, which drive respectively one of the spindle drives for vertical movement of the punch support. The present invention also relates to a method for filling capsules in the tamping punch station.

IPC 8 full level

A61J 3/07 (2006.01); **B30B 1/18** (2006.01); **B30B 9/30** (2006.01)

CPC (source: EP KR US)

A61J 3/07 (2013.01 - KR); **A61J 3/074** (2013.01 - EP KR US); **B30B 1/18** (2013.01 - EP US); **B30B 9/3064** (2013.01 - EP US); **B65B 1/04** (2013.01 - US); **B65B 63/026** (2013.01 - US)

Cited by

CN109157417A; EP3085353B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2886099 A1 20150624; **EP 2886099 B1 20160720**; CN 104721053 A 20150624; CN 104721053 B 20181102; DE 102013114693 A1 20150625; IN 4093MU2014 A 20151016; JP 2015119970 A 20150702; JP 6254515 B2 20171227; KR 101766694 B1 20170809; KR 20150073127 A 20150630; US 10569912 B2 20200225; US 2015175279 A1 20150625

DOCDB simple family (application)

EP 14199660 A 20141222; CN 201410858473 A 20141219; DE 102013114693 A 20131220; IN 4093MU2014 A 20141219; JP 2014257034 A 20141219; KR 20140186056 A 20141222; US 201414577278 A 20141219