

Title (en)

Automatic packaging machine for continuously packaging products each wrapped in a single envelope and method for continuously packaging products each wrapped in a single envelope

Title (de)

Automatische Verpackungsmaschine zum kontinuierlichen Verpacken von in einzelnen Umschlägen eingewickelten Produkten und Verfahren zum kontinuierlichen Verpacken von in einzelnen Umschlägen eingewickelten Produkten

Title (fr)

Machine de conditionnement automatique et procédé associé pour emballer en continu chaque enveloppée de produits dans une enveloppe unique

Publication

EP 2840027 B1 20160113 (EN)

Application

EP 14181738 A 20140821

Priority

IT MI20131404 A 20130823

Abstract (en)

[origin: EP2840027A1] Automatic packaging machine (10) for continuously packaging products (P) each wrapped in a single envelope (B), comprising a conveyor (12) that defines a conveying plane (PT) for conveying a continuous sheet (F) of packaging material, in particular paper, along a conveying direction (DT), said conveying plane (PT) comprises an entrance end (12a) of the continuous sheet (F) and an exit end of a plurality of envelopes, each containing a product (P), in which the entrance end (12a) is associateable with a feeding unit of a plurality of products (P) in succession one after the other and at a distance one from another on the continuous sheet (F) fed on the conveying plane (PT), a feeding unit (18) of the continuous sheet (F) on the conveying plane (PT) and that feeds the continuous sheet (F) along a feeding plane (PA) that extends below the conveying plane (PT), is orthogonal or substantially orthogonal to the conveying direction (DT) and is defined at the entrance end (12a) of the conveying plane (PT), wherein the continuous sheet (F) is fed along the feeding plane (PA) according to a feeding direction (DA) orthogonal or substantially orthogonal to the conveying plane (PT) and is deviated by a right angle or substantially a right angle in the passage from the feeding plane (PA) to the conveying plane (PT), a creasing unit (26) of the continuous sheet (F) to define a pair of longitudinal creases (C1, C2) in it for respectively folding a first longitudinal leaf (F1) that defines the back (B2) of the envelopes (B) and a second longitudinal leaf (F2) that defines the closing flap (B3) of the envelopes (B), in which the first longitudinal leaf (F1) and the second longitudinal leaf (F2) define a longitudinal central portion (F3) of the continuous sheet that defines the front (B1) of each envelope (B) and on which the products (P) are fed arranged in succession one after another and at a distance one from another, in which the packaging machine (10) comprises at least one die-cutting unit (27) for die-cutting at least one of the first longitudinal leaf (F1), or in any case the longitudinal portion of the continuous sheet that defines it, and the second longitudinal leaf (F2), or in any case the longitudinal portion of the continuous sheet that defines it, to respectively die-cut in it the back (B2) and/or the profile of the back (B2) and the closing flap (B3) and/or the profile of the closing flap (B2) of each envelope (B), in which the die-cutting unit (27) is arranged between the entrance end and the exit end of the conveying plane (PT) to act on the continuous sheet (F) fed on the conveying plane (PT).

IPC 8 full level

B65B 9/06 (2012.01); **B65B 9/067** (2012.01); **B65B 11/06** (2006.01); **B65B 11/48** (2006.01); **B65B 25/14** (2006.01); **B65B 35/10** (2006.01);
B65B 49/00 (2006.01); **B65B 61/02** (2006.01)

CPC (source: EP US)

B43M 5/042 (2013.01 - EP US); **B65B 9/067** (2013.01 - EP US); **B65B 49/00** (2013.01 - US); **B65B 61/12** (2013.01 - EP US);
B65H 2801/81 (2013.01 - EP US)

Cited by

CN107444703A; DE102022113464A1

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 2840027 A1 20150225; EP 2840027 B1 20160113; HK 1203180 A1 20151023; IT MI20131404 A1 20150224; JP 2015078017 A 20150423;
US 2015052851 A1 20150226

DOCDB simple family (application)

EP 14181738 A 20140821; HK 15103749 A 20150417; IT MI20131404 A 20130823; JP 2014169043 A 20140822; US 201414464883 A 20140821