

Title (en)

AUTOMATIC CLOSING GROUP FOR LIDS OF CARDBOARD BOXES FORMED BY PUNCHING

Title (de)

AUTOMATISCHE SCHLIESSGRUPPE FÜR DURCH STANZUNG GEFORMTE DECKEL VON PAPPKARTONS

Title (fr)

GROUPE DE FERMETURE AUTOMATIQUE POUR COUVERCLES DE BOÎTES EN CARTON FORMÉES PAR PERFORATION

Publication

**EP 3015373 B1 20170809 (EN)**

Application

**EP 15191380 A 20151026**

Priority

IT MI20141849 A 20141028

Abstract (en)

[origin: EP3015373A1] An automatic closing group for lids of cardboard boxes (10), formed by punching and fed consecutively with a coverage flap (12) open by means of a lower conveyor (19), wherein the closing group comprises a frame (18) on which a manipulator column (20) is positioned, carrying a closing head of the coverage flap (12) open above a box-shaped body (13) of the box, wherein the closing head is positioned on a slide (36) which moves transversally with respect to the advance direction of the boxes (10), wherein the slide (36) is in turn carried by another vertically movable slide (25) in the manipulator column (20), wherein the closing head comprises a front pusher (28) acting, in a first phase, on a central panel (15) of the coverage flap (12) and, in a second phase, on a further panel (16) situated in front of the central panel (15) and connected to the same by a folding invitation line, and a pair of side pushers (29), acting on two further side panels (16') of the coverage flap (12), also connected to the central panel (15) with respective folding invitation lines, control means being envisaged for the traversing of the slides and for moving the pushers (28,29) in addition to a computer (44) for setting the dimensions of the box being closed.

IPC 8 full level

**B65B 7/20** (2006.01); **B65B 7/26** (2006.01); **B65B 43/52** (2006.01); **B65B 51/00** (2006.01); **B65B 51/02** (2006.01); **B65B 59/00** (2006.01)

CPC (source: EP US)

**B65B 7/20** (2013.01 - EP US); **B65B 51/02** (2013.01 - EP); **B65B 59/003** (2019.04 - EP US); **B65B 43/52** (2013.01 - EP); **B65B 59/005** (2013.01 - EP US)

Cited by

CN109292165A; CN112660504A; CN112027244A; CN109808956A; CN110371384A; CN110949776A; EP3954534A1; CN110562511A; CN110802391A; CN110979842A; CN107364607A; CN109606782A; US11667411B2; CN106005519A; CN112810860A; EP3838768A1; WO2021123263A1

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 3015373 A1 20160504**; **EP 3015373 B1 20170809**; ES 2646294 T3 20171213

DOCDB simple family (application)

**EP 15191380 A 20151026**; ES 15191380 T 20151026