

Title (en)
METHOD AND MACHINE FOR CLOSING SQUARE OR RECTANGULAR CROSS-SECTION BOXES BY REDUCING THE HEIGHT OF SAME TO THAT OF THE CONTENTS THEREOF

Title (de)
VERFAHREN UND MASCHINE ZUM VERSCHLIESSEN VON KISTEN MIT QUADRATISCHEM ODER RECHTECKIGEM QUERSCHNITT DURCH REDUZIERUNG DER HÖHE DAVON ZUR HÖHE DER INHALTE DAVON

Title (fr)
PROCÉDÉ ET MACHINE POUR FERMER DES BOÎTES À SECTION CARRÉE OU RECTANGULAIRE EN RÉDUISANT LEUR HAUTEUR À CELLE DE LEUR CONTENU

Publication
EP 3110699 B1 20171220 (FR)

Application
EP 15717012 A 20150219

Priority
• FR 1451459 A 20140224
• FR 2015050399 W 20150219

Abstract (en)
[origin: WO2015124869A1] Method and machine for reducing the height of a box (1) produced from a foldable material, comprised of a base (1e) and at least four side walls (1a, 1b, 1c and 1d), to the level of the top of the stack of objects (3, 4, 5, 6 and 7) previously positioned in said box, without removing a section of the material of said box and without the use of any cutting tool whatsoever, but by folding the high sections (1ah, 1bh, 1ch and 1dh) of said side walls towards the centre of said box, characterized by: - breaking the connections between said side walls along the upper section of the vertical ridges (2ab, 2bc, 2cd and 2da) of said box, from the height of said vertical walls of the box to the level of the top of said stack of objects, by exerting a force (Fa, Fb, Fc, Fd), directed towards the exterior of said box, on the high section of at least two of said side walls; - simultaneously folding towards the exterior said high sections on which said force is exerted; - then folding all the high sections of said side walls towards the interior of said box, in order to bring said side walls into a substantially horizontal plane.

IPC 8 full level
B65B 51/00 (2006.01); **B65B 7/20** (2006.01); **B65B 59/00** (2006.01); **B65B 61/00** (2006.01)

CPC (source: CN EP US)
B65B 7/18 (2013.01 - CN); **B65B 7/20** (2013.01 - EP US); **B65B 51/00** (2013.01 - EP US); **B65B 51/067** (2013.01 - US); **B65B 59/001** (2019.04 - EP US); **B65B 59/003** (2019.04 - EP US); **B65B 61/00** (2013.01 - EP US); **B65B 2210/04** (2013.01 - EP US)

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)
WO 2015124869 A1 20150827; CN 106103283 A 20161109; CN 106103283 B 20190510; EP 3110699 A1 20170104; EP 3110699 B1 20171220; ES 2662243 T3 20180405; FR 3017858 A1 20150828; FR 3017858 B1 20160318; JP 2017506611 A 20170309; JP 6532485 B2 20190619; US 10633136 B2 20200428; US 2017001746 A1 20170105

DOCDB simple family (application)
FR 2015050399 W 20150219; CN 201580010018 A 20150219; EP 15717012 A 20150219; ES 15717012 T 20150219; FR 1451459 A 20140224; JP 2016570192 A 20150219; US 201515115090 A 20150219