Title (en)

Apparatus for producing crate-like containers made of synthetic material

Title (de)

Vorrichtung zur Herstellung Kastenförmiger Behälter aus Kunststoff

Title (fr)

Appareil pour la fabrication de récipients en forme de caisse en matière synthétique

Publication

EP 1302305 A3 20040121 (EN)

Application EP 02022267 A 20021004

Priority

IT IT20010614 A 20011009

Abstract (en)

[origin: EP1302305A2] An apparatus for producing crate-like containers made of synthetic material constituted by a sheet in which die-cutting and folding lines form a bottom (2), two side walls (5,6) and two front walls (3,4) that are extended laterally at opposite ends by means of a first flap (7), a complementary flap (8) and an end flap (9) that can be folded in a tube-like fashion so as to form four corner elements (13), which can be connected on the respective sides (14) to respective end portions (5a,6a) of said side walls (5,6), forming a substantially box-like structure that is open at the top; the apparatus comprises a first station (20) and a second station (21) connected by a sliding surface (22), the first station (20) comprising a plurality of lateral units (23) for folding the complementary flaps (8) and the end flaps (9) and means (44) for the adhesion of the end flaps (9) against the front walls (3,4) in order to form the corner elements (13), the second station (21) comprising a rectangular recess (50) for the folding of the containers, a pusher (51) that can be actuated from an inactive upper position to a lower position for insertion in the recess (50) for the folding of the front walls (3,4) and side walls (5,6), characterized in that the fixing means are constituted by thermal bonding elements (13) onto the end portions (5a,6a) of the remaines (97) that are located at the edges of the recess (50) and are associated with actuation elements (91) that are suitable to guide the thermal bonding laminas (97) from a retracted position to a protruding position, in which they are interposed temporarily between the corner elements (13) and the side walls (5,6), in order to produce the surface melting and mutual adhesion of the end portions (5a,6a) of the sides and of the sides (14) of the corner elements (97).

IPC 1-7

B31B 3/46

IPC 8 full level

B31B 3/46 (2006.01)

CPC (source: EP US)

B31B 50/00 (2017.07 - EP); B31B 50/46 (2017.07 - EP US); B31B 50/81 (2017.07 - EP); B31B 2100/00 (2017.07 - EP); B31B 2120/502 (2017.07 - EP)

Citation (search report)

- [XA] WO 9740977 A1 19971106 STUDIO VAME SRL [IT], et al
- [A] US 4052933 A 19771011 ROYAL THOMAS B
- [A] US 4581005 A 19860408 MOEN LENARD E [US]
- [A] GB 2137168 A 19841003 CORRUGATED PROD LTD

Cited by

DE10318873B4; US2014323282A1; ES2274671A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1302305 A2 20030416; EP 1302305 A3 20040121

DOCDB simple family (application) EP 02022267 A 20021004