

Title (en)

APPARATUS FOR PRODUCING A PALLET-LESS PACKAGING UNIT ENTIRELY WRAPPED WITH SHRINK FOIL

Publication

EP 0250697 B1 19890426 (DE)

Application

EP 87100308 A 19870113

Priority

DE 3621296 A 19860625

Abstract (en)

[origin: US4724652A] An arrangement for manufacturing non-pelletized packaging units which are completely surrounded with shrinking foil. The packaging units are formed by several layers of objects which are stacked on top of each other in such a way that at least two parallel recesses are formed into which support members of a lifting device can engage. The arrangement includes a single shrinking foil application device and a single shrinking device forming a combined arrangement and having a common conveyor and support track. Shaping tools of a shaping device are permanently assigned to an appropriate conveyor surface of a turning device. The shaping tools can be moved into position for shaping the shrinking foil in the recesses after a first shrinking foil has been applied and shrunk onto the stack. After turning the stack, the shaping tools are moved into a release position. The shaping tools can then again be moved into position for shaping the shrinking foil in the recesses after the stack has been returned to the combined arrangement and a second shrinking foil has been slid over the stack and shrunk onto the stack and the stack has then again been moved into the turning device. The shaping tools can then be moved into a release position, so that the stacks can be laterally moved away.

IPC 1-7

B65B 53/02

IPC 8 full level

B65B 9/06 (2006.01); **B65B 11/04** (2006.01); **B65B 53/02** (2006.01)

CPC (source: EP US)

B65B 53/02 (2013.01 - EP US)

Cited by

DE102009020454B3; WO2011138017A1; DE202009008434U1; EP2248722A1; EP2322433A1; DE102009052551A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB LI LU NL SE

DOCDB simple family (publication)

EP 0250697 A1 19880107; **EP 0250697 B1 19890426**; AT E42520 T1 19890515; CN 1008169 B 19900530; CN 87102880 A 19880106; DE 3621296 A1 19880114; DE 3760116 D1 19890601; ES 2007571 B3 19911101; JP H0825545 B2 19960313; JP S6312434 A 19880119; RU 1773251 C 19921030; UA 11238 A 19961225; US 4724652 A 19880216

DOCDB simple family (application)

EP 87100308 A 19870113; AT 87100308 T 19870113; CN 87102880 A 19870420; DE 3621296 A 19860625; DE 3760116 T 19870113; ES 87100308 T 19870113; JP 5044187 A 19870306; SU 4202158 A 19870320; UA 4202158 A 19870320; US 3637387 A 19870409