Title (en)

Apparatus for the reduction of PET bottles volume

Title (de)

Einrichtung zum Verringern des Volumens von PET-Flaschen

Title (fr)

Dispositif pour la réduction du volume des bouteilles en PET

Publication

EP 1671774 A1 20060621 (DE)

Application

EP 04106682 A 20041217

Priority

EP 04106682 A 20041217

Abstract (en)

A frame(1) carries a support(3) and a compression part(7) between which a bottle is placed. The compression part can move along guides(6) from an initial position towards the support and has a cross-piece(13) which, during the movement of the compression part, is perpendicular to the frame guides and has an opening(22). PET (polyethyleneterephthalate) bottles are positioned in the compression unit with their bases(5) on the support and the bottle necks projecting through the opening in the cross-piece. Guides(6) comprise elongated slots(10) in parallel flat profiles(8,9) extending along the frame on both sides of the support(3). The cross-piece(13) has two side walls(14,15) parallel to the flat profiles and extending towards the support. An axle(17) connects both sidewalls and projects through the elongated slots in both flat profiles. An additional wall(16) connects the edges of both sidewalls. The cross-piece and additional wall(16) can be swiveled through 90[deg] around the axle and locked in this position during compression. A handle is attached to both side walls. The frame(1) comprises a plate(2) and the flat profiles with cut-outs are formed by bending over the edges of a thin material sheet(11). The thin sheet is laid on the plate and fixed to it. Free width of the opening in the cross-piece is greater than the diameter of a cap placed on each bottle.

IPC 8 full level

B29B 17/00 (2006.01); B30B 9/32 (2006.01)

CPC (source: EP)

B30B 9/321 (2013.01)

Citation (search report)

- [XY] US 5448946 A 19950912 LAUX WILLIAM R [US]
- [Y] DE 9004989 U1 19900705
- [XY] FR 2795362 A1 20001229 BIGOT ALAIN [FR]
- [X] US 6571696 B1 20030603 ADAM CLAUDE [BE]
- [X] US 2002023552 A1 20020228 YAMAGUCHI MASAO [JP]
- [X] US 5832818 A 19981110 MENZAK JR JOSEPH [US]
- [A] US 1975013 A 19340925 MINNICH SIMON B
- [AY] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 13 5 February 2001 (2001-02-05)

Cited by

ITBO20130242A1; WO2009138534A1

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