

Title (en)  
Plastic bottle

Title (de)  
Kunststoffflasche

Title (fr)  
Bouteille en matière plastique

Publication  
**EP 1407971 A3 20050202 (DE)**

Application  
**EP 03022378 A 20031006**

Priority  
• AT 6722002 U 20021009  
• AT 6702003 A 20030505

Abstract (en)  
[origin: EP1407971A2] The container wall comprises an outer shell(7) and an inner container(6). The latter is integral with the bottle mouth(2) and shoulder(3) parts. The outer shell comprises upper(22) and lower(23) parts which are connected together by a joint(24) transverse to the bottle axis(13). Spacers(15) are located between the outer surface(8) of the inner container(6) and an inner face(17) of the outer shell. Ribs(19) of the first set are plates parallel to and radial to the container axis(13). At the base(28) of the inner container(6) and on the outer surface of the latter there are raised areas(29) and recesses(30) radial to the container axis. Ribs(19) of the outer shell extend between the inside of a side wall(21) of the outer shell(7) and the inside of the base(18) of the outer shell(7) and engage in the base recesses of the inner container. Spacers comprise a first set of ribs(19) on the inside(17) of the base(18) of the outer shell. Connection(24) between upper(22) and lower(23) parts of outer shell can be a snap fit or a bonded or welded joint. Connections between outer shell and inner container and also upper and lower parts of the outer shell are gas tight. A second set of ribs(20) forming spacers(15) at the upper end(10) of the outer shell are also plates parallel to and radial to the container axis. Both outer shell and inner container have a round cross-section. Connection between the outer shell and inner shell at the shoulder area can be via a supporting edge of the outer shell upper part in contact with a supporting edge of the shoulder part or alternatively by a screw thread. An Independent claim is included for: a) a process for manufacturing the container in which: i) an inner container is produced by stretch blowing of PET(polyethyleneterephthalate) by process and on the shoulder part(3) a supporting edge is formed facing the mouth part(2) and perpendicular to the container axis; ii) an outer shell is produced as upper(22) and lower(23) parts by injection of PP(polypropylene) and on the inside of the base area(18) a first set of ribs(19) is formed while in an upper end(10) of the upper part a supporting edge is formed; iii) the outer shell upper part is placed over the inner container with the supporting edge in contact with the supporting edge of the inner container; iv) the outer shell lower part(23) is placed over until the first set of ribs contact the inner container and a connection is then made between upper and lower parts of the outer shell; b) a process for preparing cooled foodstuffs, in particular cooled drinks, in which : i) a plastic bottle is produced, then filled and cooled before sending to a dealer where it may be cooled again.

IPC 8 full level  
**B65D 23/08** (2006.01)

CPC (source: EP)  
**B65D 23/0885** (2013.01)

Citation (search report)  
• [XY] EP 0911270 A1 19990428 - BENNO FELL FA [DE]  
• [Y] CA 1251744 A 19890328 - BARTOLO JERRY  
• [Y] EP 0303781 A1 19890222 - BRISTOL MYERS CO [US]

DOCDB simple family (publication)  
**EP 1407971 A2 20040414; EP 1407971 A3 20050202; EP 1407971 A8 20040929**

DOCDB simple family (application)  
**EP 03022378 A 20031006**