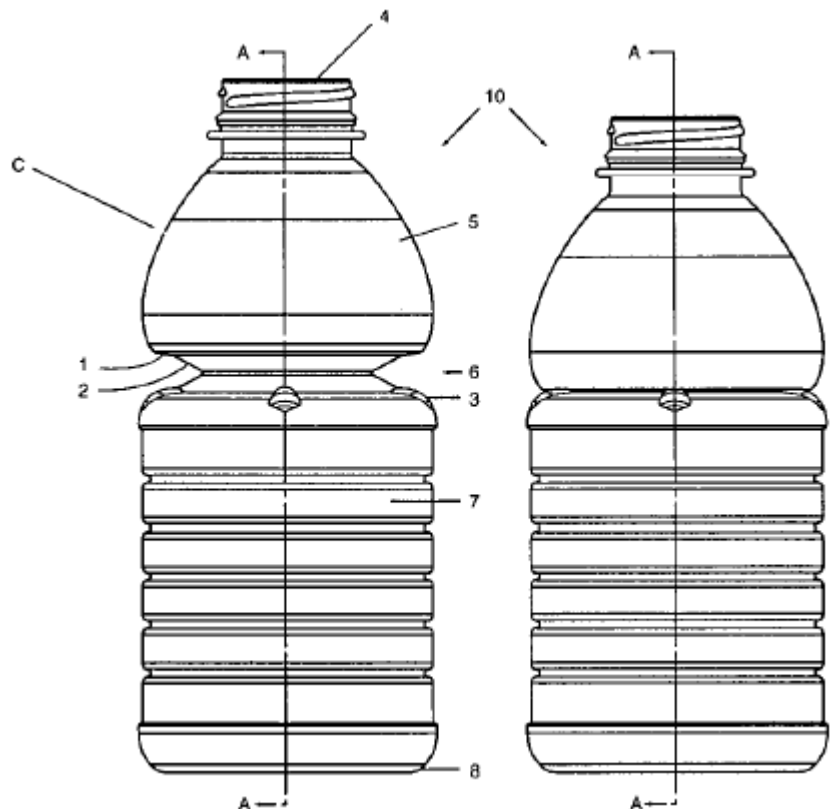


## [12] Patent

[11] Patent No.: GC 0000300	Number of the Decision to Grant the Patent: 6/651
[45] Date of Publishing the Grant of the Patent: 01/11/2006 6/2006	Date of the Decision to Grant the Patent: 14/05/2006
[21] Application No.: GCC/P/2001/1594 [22] Filing Date: 28/08/2001 [30] Priority: [31] Priority No. [32] Priority date [33] State 506684 31/08/2000 NZ 512423 16/05/2001 NZ [72] Inventor: David Murray Melrose [73] Owner: CO2 PAC Limited, 88-90 Balmoral Road Mt Eden, Auckland, New Zealand [74] Agent: Suleiman Ibrahim Al-Ammar	[51] Int. Cl. <sup>7</sup> : B65D 1/20, 1/40 [56] Cited Documents: - US 5341946 A (VAILLIENCOURT et al.) 30 August 1994 - US 5472105 A (KRISHNAKUMAR et al.) 05 December 1995 - WO 97/03885 A (CONTINENTAL PET TECHNOLOGIES INC) 06 February 1997

### [54] SEMI-RIGID COLLAPSIBLE CONTAINER

[57] Abstract: A semi-rigid collapsible container (10) has a side-wall with an upper portion (5), a central portion (6), a lower portion (7) and a base (8). The central portion (6) includes a vacuum panel portion having a control portion (2) and a initiator portion (1). The control portion (2) is inclined more steeply in a vertical direction, i.e. has a more acute angle relative to the longitudinal axis of the container (10), than the initiator portion (1). On low vacuum force being present within the container panel following the cooling of a hot liquid in the container (10) the initiator portion (1) will flex inwardly to cause the control portion (2) to invert and flex further inwardly into the container (10) and the central portion (6) to collapse. In the collapsed state upper and lower portions of the central portion (6) may be in substantial contact so as to



contain the top-loading capacity of the container (10). Raised ribs (3) made an additional support for the container in its collapsed state. In another embodiment the telescoping of the container back to its original position occurs when the vacuum force is released following removal of the container cap.

No. of claims: 28

No. of figures: 8