

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11)



EP 1 584 567 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
02.11.2006 Bulletin 2006/44

(51) Int Cl.:
B65D 17/50 (2006.01)

(43) Date of publication A2:
12.10.2005 Bulletin 2005/41

(21) Application number: 04257809.6

(22) Date of filing: 15.12.2004

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL BA HR LV MK YU

(30) Priority: 05.01.2004 US 751756

(71) Applicant: **Sonoco Development, Inc.**
Hartsville,
South Carolina 29550 (US)

(72) Inventors:
• **Williams, Alan**
Camden
South Carolina 29020 (US)

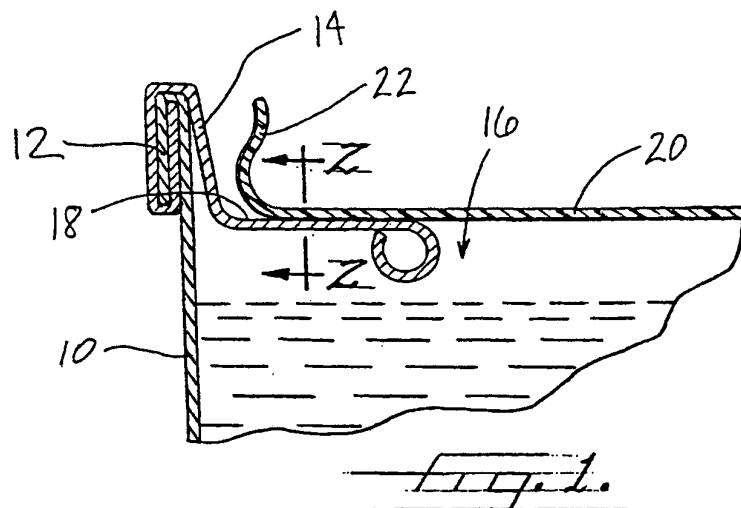
• **Nelson, Brian E.**
Camden
South Carolina 29020 (US)
• **Morin, Jeremy E.**
Florence
South Carolina 29505 (US)

(74) Representative: **Kinsler, Maureen Catherine et al**
Marks & Clerk,
19 Royal Exchange Square
Glasgow G1 3AE (GB)

(54) Easily openable closure for a retortable container

(57) A retortable, easily openable closure of the type having a metal end and a membrane closure heat-sealed thereto, wherein the metal end has a coating of a heat-seal composition (24) comprising a food-compatible metal-coating composition blended with polypropylene. The polypropylene disperses within the food-compatible metal-coating composition during curing of the coating on

the metal end such that an outer surface of the coating defines a multitude of separate, spaced islands (26) of polypropylene dispersed within the food-compatible metal-coating composition so as to form bonding sites. The membrane closure's lower surface has a heat-seal layer of polypropylene for sealing to the coating on the metal end.





DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	US 5 069 355 A (MATUSZAK ET AL) 3 December 1991 (1991-12-03) * column 4, line 23 - column 7, line 15; figures 1-6 * ----- A US 4 270 665 A (KUNIMOTO ET AL) 2 June 1981 (1981-06-02) * column 3, line 28 - column 4, line 14; figure 4 * ----- A WO 94/16963 A (POLYSTAR PACKAGING, INC; HEKAL, IHAB) 4 August 1994 (1994-08-04) * page 9, line 32 - page 13, line 35; figure 5 * -----	1,5,7 1,7 1,7	INV. B65D17/50
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
1	The present search report has been drawn up for all claims		
Place of search		Date of completion of the search	Examiner
Munich		21 September 2006	Kising, Axel
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 04 25 7809

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

21-09-2006

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5069355	A	03-12-1991	NONE			
US 4270665	A	02-06-1981	NONE			
WO 9416963	A	04-08-1994	AU EP	6391494 A 0680447 A1	15-08-1994 08-11-1995	