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Declarations under Rule 4.17:

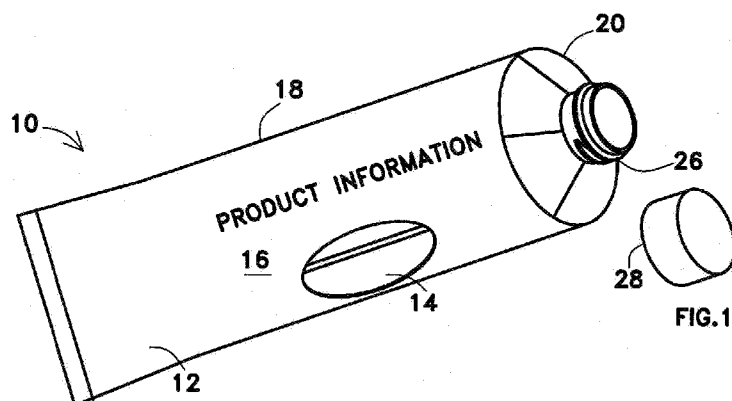
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

[Continued on next page]

(54) Title: PRODUCT CONTAINER INCLUDING AN IN-MOLD LABEL



(57) Abstract: A hollow multi-layered container comprises: an outer layer including a label and an inner layer, which is injection molded. The label has a barrier material that impedes one or more substances that emanate from a product from penetrating through the label, and the label displays information related to the product. The inner layer and the barrier material of the outer layer are substantially coextensive. For a container having a sidewall and an inclined shoulder extending inward from the sidewall, the label includes a primary segment covering the sidewall of the container and a plurality of shoulder pads covering the shoulder in at least approximately contiguous alignment with adjacent said shoulder pads. A method of inserting an in-mold label for an injection molded product into the mold, comprises the steps of: (a) inserting the label partially into a cavity bounded by a cavity mold part so that one end of the label extends from the cavity; and (b) upon closing the mold, pushing the label fully into the cavity by pushing against the label with a mold part that is moved toward the cavity when the mold is closed so that when the label is fully within the cavity, the lateral edges of the label are aligned with each other.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/046486

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B65D 35/08 (2012.01)

USPC - 222/107

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - B29C 45/14, 49/24; B65D 35/08, 35/10 (2012.01)

USPC - 222/92, 107, 520, 521; 264/509; 428/35.7, 36.1, 36.6, 36.91

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase; Google Patents

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | US 2009/0166380 A1 (LEBLAIS) 02 July 2009 (02.07.2009) entire document | 1, 2 |
| -- | | ---- |
| Y | | 3-7 |
| Y | US 2,007,685 A (LYLE) 09 July 1935 (09.07.1935) entire document | 3-7 |
| Y | US 5,962,096 A (SMITH et al) 05 October 1999 (05.10.1999) entire document | 4, 5 |
| Y | US 2007/0190275 A1 (HELMENSTEIN) 16 August 2007 (16.08.2007) entire document | 8 |
| Y | WO 2006/082006 A1 (JAAG) 10 August 2006 (10.08.2006) entire document | 8 |
| A | US 2010/0001010 A1 (MOTEGI et al) 07 January 2010 (07.01.2010) entire document | 1-9 |
| A | US 7,140,857 B2 (GRAHAM) 28 November 2006 (28.11.2006) entire document | 1-9 |
| A | US 6,063,223 A (KLAUKE et al) 16 May 2000 (16.05.2000) entire document | 1-9 |

☐ Further documents are listed in the continuation of Box C.


* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

02 March 2012

Date of mailing of the international search report

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Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/046486

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/046486

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees need to be paid.

Group I, claims 1-7 are drawn to a label.

Group II, claims 8-9 are drawn to a method for inserting into a mold.

The inventions listed in Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1, because under PCT Rule 13.2 they lack the same or corresponding special technical features for the following reasons:

The special technical features of Group I, a label comprising a barrier material that impedes one or more substances that emanate from a product from penetrating through the label, are not present in Group II; and the special technical features of Group II, inserting a label into a mold cavity, are not present in Group I.

Since none of the special technical features of the Group I and II inventions are found in more than one of the inventions, unity is lacking.