

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 May 2007 (03.05.2007)

PCT

(10) International Publication Number
WO 2007/050226 A3

(51) **International Patent Classification:**
B29C 33/42 (2006.01)

(21) **International Application Number:**

PCT/US2006/037795

(22) **International Filing Date:**

27 September 2006 (27.09.2006)

(25) **Filing Language:**

English

(26) **Publication Language:**

English

(30) **Priority Data:**

11/163,661 26 October 2005 (26.10.2005) US

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(81) **Designated States** (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
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SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

(84) **Designated States** (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

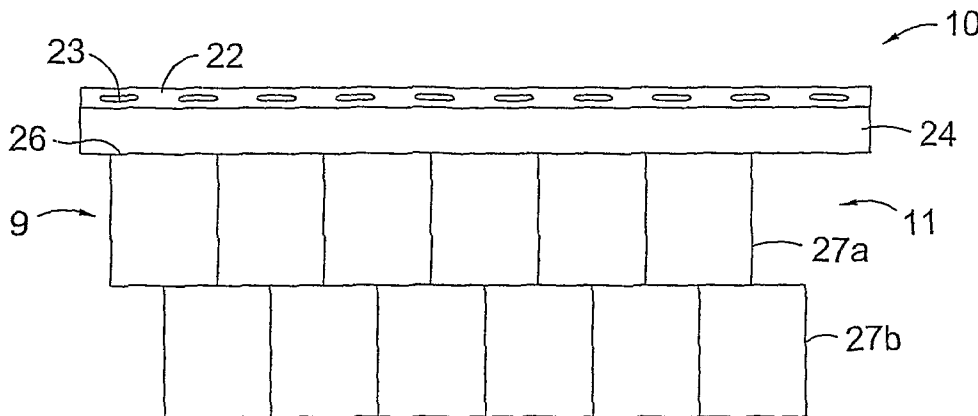
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) **Date of publication of the international search report:**

21 June 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) **Title:** METHOD AND APPARATUS FOR MOLDING AN INTERLOCKING TAB IN A SINGLE MOLDING AND FORMING STEP



(57) **Abstract:** The present invention relates to a method and apparatus for molding plastic articles. More specifically, the present invention is directed to a staged sequentially separated apparatus for injection molding of plastic panels having a flap or tab molded therewith in a single molding and forming step. The present invention provides, among other things, a method and an apparatus for forming an injection molded part with an undercut, the undercut lying generally in a plane of a major portion of the part, the undercut having an open elongate opening and being positioned between an elongate integrally molded tongue and panel. The apparatus comprising a first mold half with a first mold cavity defining surface, a second mold half with a second mold cavity defining surface, a tongue member carried by the second mold half and projecting into a mold cavity. The tongue member having generally opposing facing surfaces spaced from the first and second mold cavity surfaces for forming opposite face of a molded part undercut. The apparatus also comprising means to selectively effect movement of the transverse mold insert relative to at least a portion of the remainder of the second mold half.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/37795

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8): B29C 33/42 (2007.01)

USPC: 264/241

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 33/42 (2007.01)

USPC: 264/241

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

USPC: 425/ 135,175; 542; 264/241 , 478, 513, 297.2, 328.7 (see keywords below)

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

USPTO, PubWEST: keywords: intumescent, elastomer, silicate, imbiber bead

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,336,303 B1 (Vanderman et al.) 8 January 2002 (08.01.2002) Fig. 4, 10 and 14, portions 56, 64, 68 and 70-76 col 2 ln 17-33; col 3 ln 39-43; col 4 ln 27+; and col 5 ln 45-48	1-17
Y	US 6,918,171 B2 (Kucera et al.) 19 July 2005 (19.07.2005) col 1 ln 18-26	1-17

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

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Date of the actual completion of the international search

7 March 2007 (07.03.2007)

Date of mailing of the international search report

01 MAY 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-3201

Authorized officer:

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PCT Helpd Bsk: 571-272-4300

PCT OSP: 571-272-7774