## (19) World Intellectual Property Organization

International Bureau



# 

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

(51) International Patent Classification: B32B 27/00 (2006.01)

(21) International Application Number:

PCT/US2006/040634

(22) International Filing Date: 18 October 2006 (18.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/255,668 21 October 2005 (21.10.2005) LIS

(71) Applicant and

(72) Inventor: COBURN, Theodore, R. [US/US]; 190 Compass Circle, North Kingstown, RI 02852 (US).

(74) Agent: CASEIRO, Chris, A.; Verrill Dana, LLP, One Portland Square, Portland, ME 04112-0586 (US).

(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, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS,

### (10) International Publication Number WO 2007/050374 A3

JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, ZA, ZM, ZW.

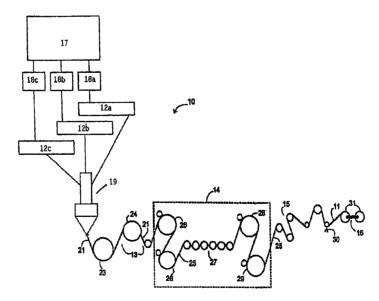
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, 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: 28 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: MULTILAYER SEPARABLE FILM OR SHEET



(57) Abstract: A multilayer film separable adjacent layers includes adjacent layers formed of compositions of dissimilar primary materials. Optionally, at least one of the layers contains a slip additive to change the release tension between adjacent layers. The multilayer film may include an adhesive layer between layers, with the adhesive layer more adhesion compatible with one of the layers than the other. The multilayer film maybe a relatively inexpensive means to produce labels, films, sheets, containers, etc., requiring protection or isolation of one surface without the additional processes of gluing together individual dissimilar layers. A layer of the multilayer film can undergo a visibly observable change when the at least one layer is released from at least one other layer; this can be used as a security mechanism, a broken seal is visibly evident.

### INTERNATIONAL SEARCH REPORT

International application No. PCT/US 06/40634

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - B32B 27/00 (2007.01)			
USPC - 428/179 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)			
USPC - 428/179			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 428/179359/15, 359/500, 359/580, 428/179, 428/215, 428/420, 428/500, 428/515, 428/516 - see keywords below			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
Searched US Pre-grant Publications, US Patent Full-Text, EPO Abstract, and JPO Abstract Databases for polymer, film, multilayer, polyethylene, polypropylene, slip additive, adhesive, tension, hologram			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
х	US 2004/0209100 A1 (LEFEBVRE et al.) 21 October 2	004 (21.10.2004); entire patent	1-21
Α	US 5,629,093 A (BISCHOF et al.) 13 May 1997 (13.05	.1997); col 1, ln 58-67	21
	•		
		}	
		ļ	
Further documents are listed in the continuation of Box C.			
* Special categories of cited documents:  "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			
"E" earlier application or patent but published on or after the international "X" document of particular relevance; the claimed invention cannot filing date			claimed invention cannot be
cited to	nt which may throw doubts on priority claim(s) or which is establish the publication date of another citation or other	step when the document is taken alone "Y" document of particular relevance; the	claimed invention cannot be
special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "Use a special reason (as specified)  "Considered to involve an inventive step when the combined with one or more other such documents, such being obvious to a person skilled in the art		tep when the document is ocuments, such combination	
"P" docume the prior	"P" document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed		
Date of the actual completion of the international search  Date of mailing of the international search			ch report
06 March 2007 (06.03.2007)			
Name and mailing address of the ISA/US  Authorized officer:			
	Γ, Attn: ISA/US, Commissioner for Patents 0, Alexandria, Virginia 22313-1450	Lee W. Young	
Facsimile No. 571-273-3201 PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774			