US007563479B2

(12) **United States Patent**
Werenicz et al.

(10) **Patent No.: US 7,563,479 B2**
(45) **Date of Patent: Jul. 21, 2009**

(54) **METHOD FOR PRODUCING A CONTINUOUS THERMOPLASTIC COATING AND ARTICLES CONSTRUCTED THEREFROM**

(75) Inventors: **Harald Werenicz**, Reppenstedt (DE); **Thomas Wittkopf**, Adendorf (DE); **Gerhard Voss**, Lüneburg (DE); **Peter Remmers**, Hamburg (DE); **Mark G. Katsaros**, Mahtomedi, MN (US); **Robert G. Polance, II**, Vadnais Heights, MN (US); **Mark S. Kroll**, Arden Hills, MN (US)

(73) Assignee: **H.B. Fuller Licensing & Financing, Inc**, St. Paul, MN (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 34 days.

(21) Appl. No.: **11/385,173**

(22) Filed: **Mar. 21, 2006**

(65) **Prior Publication Data**

US 2006/0165886 A1 Jul. 27, 2006

Related U.S. Application Data

(60) Continuation of application No. 09/057,406, filed on Apr. 8, 1998, now Pat. No. 7,078,075, which is a division of application No. 08/705,578, filed on Aug. 29, 1996, now Pat. No. 5,827,252.

(51) **Int. Cl.**
B05D 5/10 (2006.01)
B29C 47/00 (2006.01)

(52) **U.S. Cl.** **427/208.4**; 427/207.1; 156/244.11

(58) **Field of Classification Search** 427/207.1, 427/208.4; 156/244.11
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,239,370	A	3/1966	Thomson et al.	
3,239,970	A	3/1966	Bishop	
3,402,086	A *	9/1968	Smith et al.	156/244.24
3,421,960	A	1/1969	Knox	
3,496,699	A	2/1970	Quarve	
3,519,531	A	7/1970	Ost et al.	
3,573,125	A *	3/1971	Elliott	156/244.23

(Continued)

FOREIGN PATENT DOCUMENTS

DE	38 36 434	A1	2/1990

(Continued)

OTHER PUBLICATIONS

K.A. Mainstone, "Extrusion Coating and Laminating" in Modern Plastics Encyclopedia: 1983-84, McGraw Hill, 1983, pp. 195, 196, 198. (3 pages).

(Continued)

Primary Examiner—Timothy H Meeks
Assistant Examiner—Cachet I Sellman

(57) **ABSTRACT**

This invention relates to a non-contact coating method for producing a continuous coating and articles constructed therefrom. This invention further relates to a method for producing a textile material with a moisture-impermeable barrier layer and to a method for producing a moisture-absorbing article of hygiene which has such a barrier layer. This invention particularly relates to a textile material and hygienic disposable articles comprising a body fluid impermeable barrier layer produced from said coating method. Preferably, the thermoplastic composition used in the method for producing the barrier layer exhibits certain rheological characteristics.

21 Claims, 1 Drawing Sheet