



US006765054B1

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

(10) **Patent No.:** **US 6,765,054 B1**
(45) **Date of Patent:** **Jul. 20, 2004**

(54) **ETHYLENE-VINYL ACETATE HOT MELT ADHESIVE COMPOSITION AND ARTICLE AND METHOD INCORPORATING THE SAME**

(75) Inventors: **Cheryl A. Jones**, New Brighton, MN (US); **Leonora Chernyak**, Toronto (CA)

(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 122 days.

(21) Appl. No.: **10/172,858**

(22) Filed: **Jun. 17, 2002**

Related U.S. Application Data

(63) Continuation of application No. 10/128,878, filed on Apr. 24, 2002, now abandoned.

(51) **Int. Cl.**⁷ **C08L 31/04**; C08L 57/02; C09J 131/04; C09J 157/02

(52) **U.S. Cl.** **524/524**; 524/499; 525/221

(58) **Field of Search** 524/524, 499; 525/221

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,167,433 A * 9/1979 Lakshmanan 156/322

4,497,941 A	2/1985	Aliani et al.	526/331
4,728,688 A	3/1988	Tizzard et al.	524/504
4,960,295 A	10/1990	Bodouroglou	281/15.1
5,041,482 A	8/1991	Ornstein et al.	524/272
5,061,262 A	* 10/1991	Chen et al.	604/389
5,373,049 A	12/1994	Ornstein et al.	524/487
5,685,758 A	* 11/1997	Paul et al.	442/409
6,331,223 B1	* 12/2001	Wylie et al.	156/160
6,568,399 B1	* 5/2003	Wieczorek et al.	131/90

FOREIGN PATENT DOCUMENTS

JP	53147733	12/1978
JP	10130436	5/1998

* cited by examiner

Primary Examiner—Peter Szekely

(57) **ABSTRACT**

A hot melt adhesive composition that includes a first ethylene-vinyl acetate copolymer including from about 25% vinyl acetate to about 30% vinyl acetate based upon the weight of the first copolymer and having a melt index of no greater than 4 g/10 min, a second ethylene-vinyl acetate copolymer that includes no greater than about 28% vinyl acetate based upon the weight of the second copolymer and having a melt index of from about 400 g/10 min to about 2500 g/10 min, and hydrogenated petroleum hydrocarbon resin.

28 Claims, No Drawings