



US007056556B2

(12) **United States Patent**
Burns

(10) **Patent No.:** **US 7,056,556 B2**
(45) **Date of Patent:** **Jun. 6, 2006**

(54) **ADHESIVE APPLICATOR**

(75) Inventor: **Robert S. Burns**, New Wilmington, PA (US)

(73) Assignee: **Millennium Adhesive Products Incorporated**, Chagrin Falls, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 113 days.

(21) Appl. No.: **10/763,491**

(22) Filed: **Jan. 23, 2004**

(65) **Prior Publication Data**

US 2005/0160976 A1 Jul. 28, 2005

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

(52) **U.S. Cl.** **427/286; 427/208.6; 118/315; 118/305**

(58) **Field of Classification Search** **427/286, 427/208.6; 222/626, 608, 145.5, 145.6, 325-327; 404/93; 401/48; 118/305-307, 323, 315, 118/313**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,562,808 A 2/1971 Whitley, Jr.

4,055,384 A	10/1977	Palzer	
4,629,094 A	12/1986	Vogel et al.	
4,831,958 A	5/1989	Selby	
5,254,167 A	10/1993	Janoski et al.	
5,441,583 A	8/1995	Eaton et al.	
5,865,549 A	2/1999	Kinard et al.	
6,062,443 A *	5/2000	Smrt	222/608
6,325,256 B1 *	12/2001	Liljeqvist et al.	222/402.15
6,394,166 B1	5/2002	Hubbard et al.	
6,416,854 B1	7/2002	Hunter, Jr.	
2003/0129011 A1	7/2003	Kugler et al.	

* cited by examiner

Primary Examiner—Brenda A. Lamb

(74) *Attorney, Agent, or Firm*—Pearne & Gordon LLP

(57) **ABSTRACT**

An apparatus is provided for concurrently applying to a first substrate, such as a layer of a roofing surface, for the purpose of securing the first substrate to a second substrate placed on the first substrate, a plurality of substantially parallel strips of an adhesive. The apparatus includes a carrier having motive supports for transporting the carrier along a path of travel over the first substrate. Mounted on the carrier is a rack for holding at least one canister containing the adhesive. Also mounted on the carrier is a discharging mechanism that is adapted to discharge the adhesive from the at least one canister as a plurality of adhesive strips when a driving force is applied to the discharging mechanism. The driving force is supplied to the discharging mechanism by an actuating mechanism that is also mounted on the carrier.

88 Claims, 4 Drawing Sheets

