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(54) **METHOD FOR FOAM BONDING OF SPUNLACE FABRIC TO PRODUCE ENHANCED FABRIC CHARACTERISTICS**

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(58) **Field of Search** 156/148, 181, 156/78; 28/103, 104; 264/109; 427/421, 424

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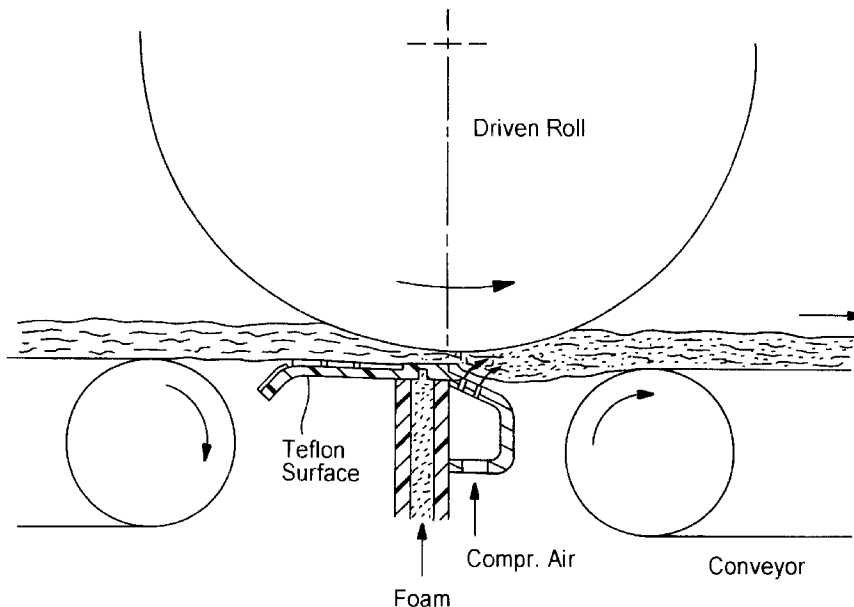
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(57) **ABSTRACT**

A method for hydroentangling a nonwoven web to increase the strength and abrasion resistance while maintaining highly desirable hand and drape characteristics. The method provides for carding and cross-lapping synthetic and/or natural fibers so as to form a desired substrate. The substrate is then hydroentangled under relatively low pressure to form a desired spunlace web, and a relatively low amount of a foam adhesive latex binding material is applied to the spunlace web. Thereafter, a force is applied to the foamed spunlace web so as to cause the foamed binding material to fully penetrate the spunlace web from face to back. The resulting hydroentangled (spunlace) nonwoven web provides an enhanced balance of tensile properties, abrasion resistance, and fabric aesthetics.

20 Claims, 23 Drawing Sheets



Foam Applicator Mechanism