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LaBrash

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(54) **FUGITIVE ROLLED SUBSTRATE MATERIAL TAIL TIE ADHESIVE AND METHOD OF USE THEREOF**

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(58) **Field of Search** 428/343, 344, 428/355 R, 689, 906

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,124,474 A 3/1964 Beaver et al.
4,508,773 A 4/1985 Maxwell

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(57) **ABSTRACT**

The present invention generally relates to a water-based tail tie adhesive for a rolled substrate material and a method of use thereof in the manufacture of rolled substrate material to secure the loose tail end of the roll to the body of the roll. More specifically, the invention is directed to a fugitive tissue and towel tail tie adhesive comprising at least one water soluble cellulose derivative and effective amount of magnesium sulfate, and optionally at least one water soluble polyol and at least one functionalized polyol such as polyester polyol, polyether polyol, polyesterether polyol, polyhydroxy compound and combinations thereof. Another aspect of the invention relates to a rolled substrate material comprising a web of substrate material rolled onto a cylindrical core, the tail end of said rolled substrate being secured to the roll by a film of the adhesive composition. The treated rolled substrate material exhibits improved releasability, leaves no stain and reduced bond strength.

23 Claims, 1 Drawing Sheet

