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United States Patent [19]

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Wang et al.

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[54] **POROUS ABSORBENT MATERIALS HAVING MODIFIED SURFACE CHARACTERISTICS AND METHODS FOR MAKING THE SAME**

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[75] Inventors: **Lin Wang; Ebrahim Rezai; Yumiko Hayashi**, all of Cincinnati, Ohio

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[73] Assignee: **The Procter & Gamble Company**, Cincinnati, Ohio

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[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: **08/779,725**

[22] Filed: **Jan. 6, 1997**

Related U.S. Application Data

[63] Continuation of application No. 08/224,454, Apr. 7, 1994, abandoned, which is a continuation-in-part of application No. 08/197,916, Feb. 17, 1994, abandoned.

[51] Int. Cl.⁶ **B32B 5/18**

[52] U.S. Cl. **428/304.4**; 428/403; 428/407; 604/367; 604/368; 604/369; 604/37

[58] Field of Search 428/304.4, 403, 428/407; 521/138, 149; 604/367, 368, 369, 378

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Primary Examiner—Elizabeth M. Cole
Attorney, Agent, or Firm—Carl J. Roof; Edward J. Milbrada; Mary Catherine Hentz

[57] ABSTRACT

A porous absorbent material that comprises a water-insoluble, water-swellaible absorbent polymer. The absorbent material comprises a polyether and/or a polycation bonded to the absorbent polymer whereby the contact angle of blood on a surface of the absorbent material attains from about 0 degree to about 40 degree. Because of the improved wettability with liquids as well as the porous structure, the absorbent material can provide higher absorbent characteristics with liquids, in particular with blood.

29 Claims, 4 Drawing Sheets

