

[54] **PREPARATION OF SOLID POLYURETHANE PARTICLES**

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[58] Field of Search 528/76, 904, 44

References Cited

U.S. PATENT DOCUMENTS

3,402,149 9/1968 Walters 260/75
3,655,627 4/1972 Hutzler 260/77.5

3,822,238 7/1974 Blair et al. 260/75
3,850,880 11/1974 Hakanson et al. 260/75
3,953,406 4/1976 Marsh 528/904
4,137,200 1/1979 Wood et al. 521/159
4,209,605 6/1980 Hoy et al. 528/54

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[57] **ABSTRACT**

This invention relates to novel hydrophilic, crosslinked, polyurea-urethane, solid, discrete particles formed by adding in droplet form a hydrophilic prepolymer comprising an isocyanate-capped polyol or mixtures thereof wherein said polyol or mixture of polyols has a reaction functionality greater than two, the total of said polyol present having an ethylene oxide content of at least 40 weight percent, before capping to a large excess of a stirred aqueous reactant. The resultant solid particles can be molded into various shapes as desired or used for coating or adhesive applications.

3 Claims, No Drawings