

[54] **BIODEGRADABLE POLYMERIC MATERIALS BASED ON POLYETHER GLYCOLS, PROCESSES FOR THE PREPARATION THEREOF AND SURGICAL ARTICLES MADE THEREFROM**

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[58] **Field of Search** 528/76, 271; 525/450; 428/423.7, 480; 424/78; 604/19

[56] **References Cited**

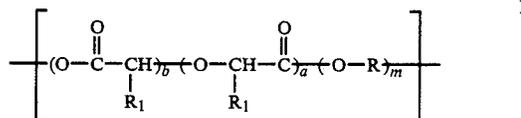
U.S. PATENT DOCUMENTS

4,355,133 10/1982 East et al. 528/271

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[57] **ABSTRACT**

The invention provides poly(α -hydroxy-carboxylic acid)/poly(oxyalkylene) polymers selected from multi-block polymers of the following repeating unit I



wherein R is an alkylene group, R₁ is hydrogen or methyl groups, m is a positive integer, and a and b are zero or positive integers, the case where a and b are simultaneously zero being excluded, and chain extended multiblock polymers which polymers are bioabsorbable and biodegradable, these polymeric materials being derived from reacting diols in the form of polyether glycols with α -hydroxy-carboxylic acids. The invention also provides methods for the preparation of such polymeric materials and bioabsorbable surgical articles made therefrom.

43 Claims, No Drawings