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(54) **PRODUCTION METHOD FOR HYDROPHILIC MODIFIED POLYROTAXANE**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

The present invention aims to provide a method of producing a hydrophilic modified polyrotaxane, which enables production of a hydrophilic modified polyrotaxane excellent in storage stability in an industrially advantageous way. The present invention provides a method of producing a hydrophilic modified polyrotaxane, comprising: a hydrophilic modification step of preparing a solution of a hydrophilic modified polyrotaxane by modifying all or part of hydroxy groups on a cyclodextrin of a polyrotaxane with hydrophilic modifying groups, the polyrotaxane containing the cyclodextrin, a polyethylene glycol included in the cavities of the cyclodextrin molecules in a skewered manner, and a capping group that is placed at each end of the polyethylene glycol and prevents dissociation of the cyclodextrin molecules from the polyethylene glycol; and a drying step in which the prepared solution of the hydrophilic modified polyrotaxane is formed into a thin film state and dried.

5 Claims, No Drawings