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(54) **DRUG DELIVERY THROUGH HYDROGEL PLUGS**

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See application file for complete search history.

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(57) **ABSTRACT**

An embodiment is a medical prosthesis for blocking or reducing tear flow through a punctum or canaliculus of a human eye and delivering a drug to the eye that comprises a dehydrated covalently crosslinked synthetic hydrophilic polymer hydrogel with dimensions to pass through a puncta lacrimali, with the dehydrated hydrogel absorbing physiological water to swell to at least 1 mm in cross-sectional width and conformably fit a canaliculus, with the hydrogel comprising a therapeutic agent dispersed through the hydrogel for release to an eye, with the hydrogel having a water content of at least about 50% by weight or volume when allowed to fully hydrate in vitro in physiological saline.

23 Claims, 27 Drawing Sheets