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(54) **LIBRARY OF PH RESPONSIVE POLYMERS AND NANOPROBES THEREOF**

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(57) **ABSTRACT**

The present disclosure relates to polymers which contain a hydrophobic and hydrophilic segment which is sensitive to pH. In some aspects, the polymers form a micelle which is sensitive to pH and results in a change in fluorescence based upon the particular pH. In some aspects, the disclosure also provides methods of using the polymers for the imaging of cellular or extracellular environment or delivering a drug.