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(71) Applicant (for all designated States except US): **UNIVERSITY OF CHICAGO** [US/US]; 5555 S. WOODLAWN AVE., Suite 300, Chicago, Illinois 60637 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ALVERDY, John, C.** [US/US]; 921 Club Circle, Glenview, Illinois 60025 (US). **CHANG, Eugene, B.** [US/US]; Dept. of Medicine, G705 (MC 6084), 5841 S. Maryland Avenue, Chicago, Illinois 60637 (US). **PETROF, Elaine, O.** [US/US]; Dept. of Medicine, G705 (MC 6084), 5841 S. Maryland Avenue, Chicago, Illinois 60637 (US).

(74) Agent: **MERKEL, William, K.**; **MARSHALL, GERSTEIN & BORUN LLP**, 6300 SEARS TOWER, 233 South Wacker Drive, Chicago, Illinois 60606 (US).

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(54) Title: THERAPEUTIC DELIVERY SYSTEM COMPRISING A HIGH MOLECULAR WEIGHT PEG-LIKE COMPOUND

(57) Abstract: The present invention provides a system for delivering a wide range of chemical and biological therapeutics, including protein therapeutics, via transepithelial routes. The system comprises a high molecular weight polyethylene glycol-like (HMW PEG-like) compound for use with a therapeutic compound. Optionally, the system comprises a composition containing one or more HMW PEGlike compounds and one or more therapeutics, supplemented with a protective polymer such as dextran and/or essential pathogen nutrients such as L-glutamine. Administered alone, the HMW PEG-like compounds also provide therapeutic benefits. Also provided are methods for preventing or treating epithelial diseases, disorders, or conditions, such as an epithelium at risk of developing gut-derived sepsis attributable to an intestinal pathogen, as well as methods for monitoring the administration of HMW PEG-like compounds.

WO 2006/073430 A2