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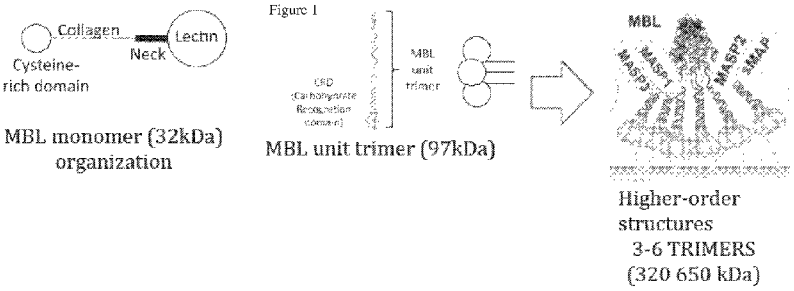
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(54) **Title**: ENGINEERED OPSONIN FOR PATHOGEN DETECTION AND TREATMENT



(57) **Abstract**: The present invention provides for engineered molecular opsonins that may be used to bind biological pathogens or identify subclasses or specific pathogen species for use in devices and systems for treatment and diagnosis of patients with infectious diseases, blood-borne infections or sepsis. An aspect of the invention provides for mannose-binding lectin (MBL), which is an abundant natural serum protein that is part of the innate immune system. The ability of this protein lectin to bind to surface molecules on virtually all classes of biopathogens (viruses, bacteria, fungi, protozoans) make engineered forms of MBL extremely useful in diagnosing and treating infectious diseases and sepsis.

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