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(54) Title: ANTI-FOULING PAINTS AND COATINGS

(57) Abstract: Disclosed herein are a materials such as a coating, an elastomer, an adhesive, a sealant, a textile finish, a wax, and a filler for such a material, wherein the material includes an proteinaceous molecule such as a peptide and/an enzyme that confer a metal binding, an anti-fouling and/or an antibiotic property to the material. In particular, disclosed herein are marine coatings such as a marine paint that comprise an anti-fouling peptide sequence that reversibly binds a metal cation that is toxic to a fouling organism. Also disclosed herein are methods of reducing fouling on a surface by treating the surface with a metal binding peptide.