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Declarations under Rule 4.17:

[Continued on next page]

(54) Title: NON-FOULING, ANTI-MICROBIAL, ANTI-THROMBOGENIC GRAFT-FROM COMPOSITIONS

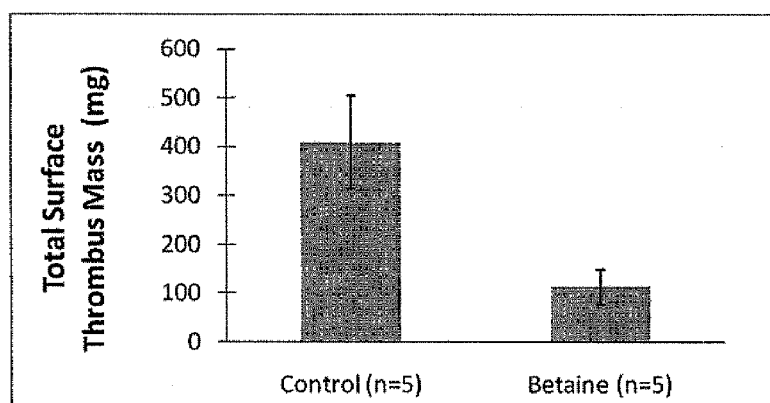


Figure 1

(57) **Abstract:** Substrates, optionally coated with an undercoating layer, having grafted therefrom one or more non-fouling materials are described herein. The non-fouling, polymeric material can be grafted from a variety of substrate materials, particularly polymeric substrates and/or polymeric undercoating layers. The graft-from techniques described herein can result in higher surface densities of the non-fouling material relative to graft-to formulations. Graft-from methods can be used to produce covalently tethered polymers. The compositions described herein are highly resistant to protein absorption, particularly in complex media and retain a high degree of non-fouling activity over long periods of time. The compositions described herein may also demonstrate antimicrobial and/or anti-thrombogenic activity. The non-fouling material can be grafted from the substrate, or optionally from an undercoating layer on the substrate, preferably without significantly affecting the mechanical and/or physical properties of the substrate material.



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