

[54] **IMPLANTABLE CATHETERS WITH NON-ADHERENT CONTACTING POLYMER SURFACES**

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[57] **ABSTRACT**

Catheters for long term implantation having polymer surfaces in face-to-face contact which are provided with a thin film coating of a glow discharge plasma polymerized fluorocarbon to prevent adhesion of the contacting surfaces. The polymerized fluorocarbon film, between about 50 and 1000 Angstroms in thickness, is bonded to the substrate material giving a low surface energy without changing its bulk properties. The low surface energy will prevent adhesion of cured polymer surfaces in contact and act as a lubricant. The smooth pinhole-free films will control or prevent diffusion into or out of the bulk material. These biocompatible films provide an alternative use for polymers whose bulk properties are unacceptable but whose surface properties are desirable.

8 Claims, No Drawings