

Title (en)

ANTIMICROBIAL POLYMERIC SURFACES

Title (de)

ANTIMIKROBIELLE POLYMERFLÄCHEN

Title (fr)

SURFACES POLYMERIQUES ANTIMICROBIENNES

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Abstract (en)

[origin: WO02085542A1] Bactericidal compositions are disclosed that comprise a polymeric compound immobilized on a material. Medical devices are also disclosed which comprise such a bactericidal composition. Methods are disclosed for covalently derivatizing the surfaces of common materials with an antibacterial polycation, e.g., poly(vinyl-N-pyridinium bromide); the first step of the methods involves coating the surface with a nanolayer of silica. Various commercial synthetic polymers derivatized in this manner are bactericidal, i.e., they kill on contact up to 99 % of deposited Gram-positive and Gram-negative bacteria, whether deposited through air or water.

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