

Title (en)

CROSS-LINKED POLYETHYLENE OXIDE COATINGS TO IMPROVE THE BIOCOMPATIBILITY OF IMPLANTABLE MEDICAL DEVICES

Title (de)

AUFGETEILTES EINZELFUNKSTELLEN BÜNDELFUNK-KOMMUNIKATIONSSYSTEM

Title (fr)

REVETEMENTS A BASE D'OXYDE DE POLYETHYLENE RETICULE DESTINES A AMELIORER LA COMPATIBILITE BIOLOGIQUE D'APPAREILS MEDICAUX DESTINES A ETRE IMPLANTES

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Application

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Priority

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Abstract (en)

[origin: WO9614887A1] Polyethylene oxide (PEO) coatings providing improved biocompatibility for implantable medical devices are disclosed. The PEO coatings comprise functionalized, end-capped PEO which is attached at one end to the medical device. The PEO compounds are then cross-linked by 1) exposure to a high energy source for a time sufficient to cause the PEO compounds to form a cross-linked, insoluble network or 2) by reacting the free functionalized ends of a sufficient number of bound PEO compounds with a crosslinking agent whose functional groups are reactive toward the bound PEO chain's functionalized ends. These PEO coatings are able to survive ethylene oxide sterilization procedures with minimal loss of protein or cell repulsion ability.

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