

Title (en)

ORTHOPEDIC IMPLANTS HAVING GRADIENT POLYMER ALLOYS

Title (de)

ORTHOPÄDISCHE IMPLANTATE MIT GRADIENTEN-POLYMERLEGIERUNGEN

Title (fr)

IMPLANTS ORTHOPÉDIQUES COMPORTANT DES ALLIAGES DE POLYMÈRE À GRADIENT

Publication

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Application

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Abstract (en)

[origin: WO2012096997A2] Orthopedic implants having a bone interface member and a water swellable IPN or semi-IPN with a stiffness, hydration, and/or compositional gradient from one side to the other and physically attached to the bone interface member. The invention also includes an orthopedic implant system including an implant that may conform to a bone surface and a joint capsule. The invention also includes orthopedic implants with water swellable IPN or semi-IPNs including a hydrophobic thermoset or thermoplastic polymer first network and an ionic polymer second network, joint capsules, labral components, and bone interface members shaped to conform to a bone surface. The invention also includes a method of inserting an orthopedic implant having a metal portion and a flexible polymer portion into a joint, including inserting the implant in a joint in a first shape and changing the implant from a first shape to a second shape to conform to a shape of a bone.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [X] US 2010010114 A1 20100114 - MYUNG DAVID [US], et al
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- See references of WO 2012096997A2

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