

Title (en)

Polymeric material grafted with phosphate-containing grafts and use.

Title (de)

Phosphatgruppen enthaltende Pfropfpolymeren und Verwendung.

Title (fr)

Matériau polymérique à greffons phosphatés et utilisations.

Publication

EP 0441675 B1 19950524 (FR)

Application

EP 91400192 A 19910129

Priority

FR 9001622 A 19900205

Abstract (en)

[origin: EP0441675A1] At least some graft units of the grafted polymeric material according to the invention consist of phosphate units of general formula: <IMAGE> in which R1 is H or an alkyl, R2 an alkylene, an alkylene oxide and/or polyoxide and R3<+> and R4<+> are either separate and chosen from H<+>, monovalent metal ions, or cations containing N<+>, or are merged, R3R4<2+> being a divalent metal ion. The uses of this material are numerous: as ion exchanger over a wide pH range, R3<+> and R4<+> being H<+>; as antiseptics, R3<H N=O><+> and R4<+> being metal ions with antiseptic activity like Ag<+>, Zn<2+>, Cu<2+> or quaternary ammoniums or chlorhexidine; as bone substitute, R3R4<2+> being Ca<2+>; as a binder-free composite, the degree of grafting being at least 20 %. The starting polymeric material is, for example, based on polypropylene, cellulose or silk. The process preferably consists in grafting the material with the aid of an ethylenic ester of phosphoric acid of general formula: <IMAGE>

IPC 1-7

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IPC 8 full level

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