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(54) Title: A SYNTHETIC COMPOSITE AS BONE GRAFT AND THE METHOD THEREOF

(57) Abstract: The invention is for a synthetic composite for a bone graft comprising of: bio inert polymers comprising poly lactic acid, poly D, L-Lactic acid; bio active polymer consisting of polypropylene fumarate or diester of fumaric acid and propylene diol (1,2-Diol); and a bioactive inorganic component consisting of a metal fluorophosphates glass powder wherein the amount of the bioactive components is upto 30% (w/w) of the composite. The bioactive inorganic metal fluorophosphates glass powder of the composite is one of zinc fluorophosphate, magnesium fluorophosphate or silver fluorophosphate. The invention pertains to the method of making the scaffold, and also the 3D printed scaffold.



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