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(54) Title: SELECTIVE LASER SINTERING OF POLYMERIC POWDERS EMBEDDED WITH WATER-SOLUBLE FLOW AD-
DITIVES

(57) Abstract: This invention is directed to a polymeric powder preferably a medical grade polymeric powder, for use in Selective Laser Sintering (SLS) for application fields including but not limited to medical, food, and pharmaceutical. The, preferably medical grade, polymer is biodegradable and can be used to manufacture objects such as medical implants and tissue scaffolds. The powder is biocompatible and biodegradable and can include a flow additive. The flow additive can consist of an osteoconductive flow aid suited for medical applications, a water-soluble salt flow aid that does dissolve during device degradation, or a combination of both. The water-soluble salt flow aid is used for applications where no leftover signs of implantation are observed within tissue after device degradation.



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