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PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(Shri Rajendra Ratnoo)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

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(57) Abstract :

METHOD FOR OPTIMIZATION OF ONE DIMENSIONAL NANOSTRUCTURED PVDF DOPED MWCNT NANOFIBER
ABSTRACT A method of preparation of a melt solution using optimization method comprising: dissolving a 3 gm of pellets of copolymer PVDF-HFP (Poly (Vinylidene Fluoride-Hexafluoropropylene)) in a 20 ml of DMF (Dimethylformamide) solvent and stirring on a magnetic stirrer at 1000 rpm for 30 minutes to obtain a PVDF-HFP-DMF solution; dissolving a 0.01 gm of a MWCNT (Multi-Wall Carbon Nanotube) of 10-12 nm in dimensions in a 5 ml of a DMF (Dimethylformamide) solvent and ultrasonicated at frequency of 1 MHz for 20 minutes to obtain a MWCNT-DMF solution; adding the MWCNT-DMF solution to the PVDF-HFP-DMF solution kept on the magnetic stirrer and stirred again at 1000 rpm for one and half hours to obtain a dissolved solution of PVDF-HFPMWCNT- DMF or a melt solution; and ultrasonicated the dissolved solution of PVDF-HFPMWCNT- DMF or the melt solution again at frequency of 1 MHz for 15-20 minutes and transferred it to a 5 ml syringe, wherein the PVDF-HFP-MWCNT-DMF or a melt solution is used for the production of nanofibers with one dimensional nanostructured PVDF doped MWCNT by a electrospinning system.

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