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(54) Title: METAL-CNT COMPOSITE, PRODUCTION METHOD AND MATERIALS THEREFOR

Fig. 9



(57) Abstract: According to a first aspect of the invention, a method for producing a metal-CNT composite material is proposed. The method includes providing a layer of CNT by depositing CNT coated with a polyphenol or poly(catecholamine) coating and filling the interstices of the carbon nanotubes layer with a metal so as to form a metal matrix, in which CNT are embedded. The filling is effected by electrodeposition or by electroless deposition. The polyphenol or poly(catecholamine) coating is crosslinked by metal ions, the metal ions promoting, as metal seeds, adhesion and/or growth of the metal matrix during the filling step. A further aspect of the invention relates to the metal-CNT composite obtainable by the method.

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WO 2020/043590 A1

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