

Title (en)

COMPOSITE MATERIAL COMPOSED OF A METAL MATRIX IN WHICH CNT FILAMENTS ARE DISTRIBUTED, AND METHOD FOR THE PRODUCTION OF SUCH A COMPOSITE MATERIAL

Title (de)

MATERIALVERBUND, BESTEHEND AUS EINER METALLISCHEN MATRIX, IN DER CNT-FILAMENTE VERTEILT SIND, SOWIE VERFAHREN ZUR HERSTELLUNG EINES SOLCHEN MATERIALVERBUNDEN

Title (fr)

MATÉRIAUX COMPOSÉS D'UNE MATRICE MÉTALLIQUE DANS LAQUELLE SONT RÉPARTIS DES FILAMENTS DE NANOTUBE DE CARBONE ET PROCÉDÉ DE FABRICATION D'UN TEL MATÉRIAUX COMPOSÉS

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Application

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Priority

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Abstract (en)

[origin: WO2009124862A1] The invention relates to a composite material (11) composed of a metal matrix (15) in which CNT filaments (13) are distributed. According to the invention, said CNT filaments are intertwined, interwoven, or tied together, and the matrix (15) is cold-worked. This advantageously allows the matrix material to be filled with a higher percentage of CNT filaments than when dispersed CNT are electrodeposited. The invention also relates to a method for producing such a composite material (11). In said method, suitable semifinished products such as knitted fabrics, woven fabrics, nets, fleeces, or papers made of CNT filaments are coated (preferably electroplated) with the metal matrix.

IPC 8 full level

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