

Title (en)

ELEMENT WHICH IS ELECTRICALLY CONDUCTIVE ON AT LEAST ONE SURFACE AND COMPRISES CARBON NANOTUBES AND A POLYMER, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

ELEMENT, DAS ZUMINDEST AN EINER OBERFLÄCHE ELEKTRISCH LEITEND UND MIT KOHLENSTOFF-NANORÖHRCHEN UND EINEM POLYMER GEBILDET IST, SOWIE VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

ÉLÉMENT ÉLECTROCONDUCTEUR AU MOINS SUR UNE SURFACE ET FORMÉ DE NANOTUBES DE CARBONE ET D'UN POLYMÈRE ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 2504167 B1 20170111 (DE)

Application

EP 10805677 A 20101119

Priority

- DE 102009056583 A 20091123
- DE 2010001388 W 20101119

Abstract (en)

[origin: WO2011060774A2] The invention relates to an element which is electrically conductive on at least one surface and comprises carbon nanotubes (CNT) and a polymer, and to a method for the production thereof. The aim of the invention is to provide elements which are largely formed of an electrically non-conductive polymer and present at least in surface regions electrically conductive properties, wherein the elements are to be produced in a simple, cost-effective manner. To this end, carbon nanotubes are embedded, starting from an electrically conductive surface, in the polymer in a zone having a layer thickness of a maximum of 1000 nm and the maximum content of carbon nanotubes in the element is not more than 0.1% by weight.

IPC 8 full level

B32B 27/18 (2006.01); **B82Y 30/00** (2011.01); **C08K 3/04** (2006.01); **H01B 1/24** (2006.01)

CPC (source: EP)

H01B 1/24 (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2011060774 A2 20110526; WO 2011060774 A3 20110728; DE 102009056583 A1 20110601; DE 102009056583 B4 20150820; EP 2504167 A2 20121003; EP 2504167 B1 20170111; ES 2615283 T3 20170606

DOCDB simple family (application)

DE 2010001388 W 20101119; DE 102009056583 A 20091123; EP 10805677 A 20101119; ES 10805677 T 20101119