

Title (en)
POLYVINYLDENE FLUORIDE COMPOSITES AND METHODS FOR PREPARING SAME

Title (de)
POLYVINYLDENFLUORIDVERBINDUNGEN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)
COMPOSITES A BASE DE POLY(FLUORURE DE VINYLIDENE) ET PROCEDE D'OBTENTION

Publication
EP 1415309 A1 20040506 (EN)

Application
EP 02749893 A 20020710

Priority
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Abstract (en)
[origin: WO03007314A1] An electrically conductive composite comprising a polyvinylidene fluoride polymer or copolymer and carbon nanotubes is provided. Preferably, carbon nanotubes may be present in the range of about 0.5-20% by weight of the composite. The composites are prepared by dissolving the polymer in a first solvent to form a polymer solution and then adding the carbon nanotubes into the solution. The solution is mixed using an energy source such as a sonicator or a Waring blender. A precipitating component is added to precipitate out a composite comprising the polymer and the nanotubes. The composite is isolated by filtering the solution and drying the composite. The composites are also prepared by mixing or dispersing carbon nanotubes in polymer emulsion using an energy source such as a Waring blender. The liquid in the mixture is then evaporated to obtain the composite comprising the polymer and the nanotubes.

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IPC 8 full level
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