

Title (en)

COMPOSITE COMPRISING NANOSIZE POWDER AND USE OF THE COMPOSITE

Title (de)

VERBUNDMATERIAL MIT NANO-PULVER UND VERWENDUNG DES VERBUNDMATERIALS

Title (fr)

MATÉRIAU COMPOSITE AVEC NANOPPOUDRE ET UTILISATION DU MATÉRIAU COMPOSITE

Publication

**EP 2303956 A1 20110406 (DE)**

Application

**EP 09772249 A 20090529**

Priority

- EP 2009056612 W 20090529
- DE 102008030904 A 20080630

Abstract (en)

[origin: WO2010000549A1] The invention relates to a composite comprising at least one base material and at least one filler powder mixture dispersed in the base material, where the filler powder mixture comprises a filler powder fraction and at least one further filler powder fraction, the filler powder fraction has an average powder particle diameter (D50) selected from the range from 1 µm to 100 µm and the total proportion of the filler powder mixture in the composite (degree of fill) is above 50% by weight. The composite is characterized in that the further filler powder fraction has a further average powder particle diameter selected from the range from 1 nm to 50 nm and the proportion of the further filler powder fraction in the filler powder mixture is selected from the range from 0.1% by weight to 50% by weight. It has been found that a high degree of fill can be achieved at a low viscosity in the presence of nanosize filler particles. The composite is particularly suitable as embedding composition (pourable resin system).

IPC 8 full level

**C08K 3/00** (2006.01)

CPC (source: EP US)

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