

Title (en)

NANOCOMPOSITE, METHOD FOR PRODUCTION AND USE THEREOF

Title (de)

NANOKOMPOSITE, VERFAHREN ZU IHRER HERSTELLUNG UND IHRE VERWENDUNG

Title (fr)

NANOCOMPOSITES, PROCEDE DE PRODUCTION ET UTILISATION DESDITS NANOCOMPOSITES

Publication

EP 1525227 A2 20050427 (DE)

Application

EP 03794812 A 20030904

Priority

- DE 0302933 W 20030904
- DE 10241510 A 20020907

Abstract (en)

[origin: WO2004024811A2] A method for production of nanocomposites from nanopowders in agglomerated form and organic binders is disclosed. The agglomerate can be permanently dispersed such as to be able to obtain transparent nanocomposites by surface modification of the nanofiller in an organic medium. The modified nanopowder is preferably isolated as a dry intermediate. The production of said nanocomposite is simpler than the production of nanocomposites by the sol-gel technique and is furthermore more flexible and has greater applicability. An important application for the nanocomposite is in the production of scratch-resistant paints.

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IPC 8 full level

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C08L 63/00 (2006.01); **C08L 67/06** (2006.01); **C08L 101/00** (2006.01); **C09C 1/30** (2006.01); **C09C 1/36** (2006.01); **C09D 7/12** (2006.01);
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CPC (source: EP US)

B82Y 30/00 (2013.01 - EP US); **C08G 59/42** (2013.01 - EP US); **C08J 5/005** (2013.01 - EP US); **C08K 9/04** (2013.01 - EP US);
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C08L 2666/54 (2013.01 - EP US); **Y10T 428/2982** (2015.01 - EP US)

Citation (search report)

See references of WO 2004024811A2

Citation (examination)

- EP 0867469 A2 19980930 - DSM NV [NL], et al
- WO 03102089 A1 20031211 - PPG IND OHIO INC [US]
- "Filler-coupling agent-matrix interactions in silica/polymethylmethacrylate composites", JOURNAL OF BIOMEDICAL RESEARCH, PART A, vol. 57, no. 3, 5 December 2001 (2001-12-05), pages 384 - 393

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