

Title (en)

NANOMATERIAL POLYMER COMPOSITIONS AND USES THEREOF

Title (de)

NANOMATERIAL-POLYMER-ZUSAMMENSETZUNGEN UND VERWENDUNGEN DAVON

Title (fr)

COMPOSITIONS POLYMÈRES DE NANOMATÉRIAUX ET UTILISATIONS DE CES COMPOSITIONS

Publication

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Application

EP 07789313 A 20070824

Priority

- GB 2007003226 W 20070824
- US 51348906 A 20060831

Abstract (en)

[origin: WO2008025962A1] The present invention is directed to compositions ("Nanomaterial Polymer Compositions") comprising a silicone polymer and a nanomaterial, including but not limited to, a single or multi-walled nanotube, a nanowire, a nanodot, a quantum dot, a nanorod, a nanocrystal, a nanotetrapod, a nanotripod, a nanobipod, a nanoparticle, a nanosaw, a nanospring, a nanoribbon, a branched nanomaterial, or any combination thereof. The Nanomaterial Polymer Compositions are useful for optical and sensing devices including but not limited to noise suppression, passive Q-switching, mode-locking, waveform shaping, optical switching, optical signal regeneration, phase conjugation or filter devices, dispersion compensation, wavelength conversion, a soliton stabilization, microcavity applications, interferometers; optical, magneto-optical or electro-optical modulation; and biochemical sensors and photodetectors. The Nanomaterial Polymer Compositions are also useful in soft lithography processes.

IPC 8 full level

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B82Y 30/00 (2013.01); **C09C 3/12** (2013.01); **C01P 2004/13** (2013.01); **C01P 2004/64** (2013.01)

Citation (search report)

See references of WO 2008025962A1

Citation (examination)

- EP 1772770 A1 20070411 - NAT INST OF ADVANCED IND SCIEN [JP]
- WO 2005096089 A1 20051013 - NAT INST OF ADVANCED IND SCIEN [JP], et al

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