

Title (en)

COMPOSITIONS AND METHODS FOR POLYMER COMPOSITES

Title (de)

ZUSAMMENSETZUNGEN UND VERFAHREN FÜR POLYMERVERBINDUNGEN

Title (fr)

COMPOSITIONS ET PROCÉDÉS POUR COMPOSITES POLYMÈRES

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Abstract (en)

[origin: WO2008002890A2] This invention relates to organic salt compositions useful in the preparation of organoclay compositions, polymer-organoclay composite compositions, and methods for the preparation of polymer nanocomposites. In one embodiment, the present invention provides a method of making a polymer-organoclay composite composition, said method comprising melt mixing a quaternary organoclay composition comprising alternating inorganic silicate layers and organic layers, said organic layers comprising a quaternary organic cation with a polyetherimide composition; said melt mixing being carried out at a temperature in a range between about 300°C and about 450°C to provide a polymer-organoclay composite composition, said polymer-organoclay composite composition being characterized by a percent exfoliation of at least 10 percent.

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