

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: WO2008002888A2] 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 polymer-organoclay composite composition comprising (a) a polymeric resin; and (b) an organoclay composition comprising alternating inorganic silicate layers and organic layers, said organic layers comprising a quaternary phosphonium cation having structure X wherein Ar¹, Ar², and Ar³ are independently C₂-C₅₀ aromatic radicals; Ar⁴ is a bond or a C₂-C₅₀ aromatic radical; "a" is a number from 1 to about 200; "c" is a number from 0 to 3; R¹ is independently at each occurrence a halogen atom, a C₁-C₂₀ aliphatic radical, a C₅-C₂₀ cycloaliphatic radical, or a C₂-C₂₀ aromatic radical; and R² is a halogen atom, a C₁-C₂₀ aliphatic radical, a C₅-C₂₀ cycloaliphatic radical, a C₂-C₅₀ aromatic radical, or a polymer chain.

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