

Title (en)
PYRIDINIUM SALTS FOR POLYMER COMPOSITES AND METHODS FOR THEIR PREPARATION

Title (de)
PYRIDINSALZE FÜR POLYMER VERBINDUNGEN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)
COMPOSITIONS ET PROCÉDÉS POUR COMPOSITES POLYMÈRES

Publication
EP 2032639 A2 20090311 (EN)

Application
EP 07799002 A 20070625

Priority
• US 2007072017 W 20070625
• US 80582106 P 20060626
• US 76624907 A 20070621

Abstract (en)
[origin: WO2008002868A2] 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 pyridinium salt having structure XV; wherein Ar⁶, Ar⁷, and Ar⁸ are independently C₂-C₅₀ aromatic radicals; "b" is a number from 0 to 2; "d" is a number from 0 to 4; R³ and R⁴ are independently at each occurrence a halogen atom, a C₁-C₂₀ aliphatic radical, a C₅-C₂₀ cycloaliphatic radical, or a C₂-C₂₀ aromatic radical; Z is a bond, a divalent C₁-C₂₀ aliphatic radical, a divalent C₅-C₂₀ cycloaliphatic radical, a divalent C₂-C₂₀ aromatic radical, an oxygen linking group, a sulfur linking group, a SO₂ linking group, or a Se linking group; Ar⁹ is a C₁₀-C₂₀₀ aromatic radical, or a polymer chain comprising at least one aromatic group; and X⁻ is a charge balancing counterion.

IPC 8 full level
C08K 9/04 (2006.01); **C07D 213/06** (2006.01); **C07D 213/20** (2006.01); **C07D 401/14** (2006.01); **C07D 411/12** (2006.01); **C08K 3/34** (2006.01); **C08K 5/50** (2006.01); **C08L 71/00** (2006.01); **C08L 79/08** (2006.01); **C08L 81/06** (2006.01)

CPC (source: EP)
C07D 213/06 (2013.01); **C07D 213/20** (2013.01); **C07D 401/14** (2013.01); **C07D 411/12** (2013.01); **C08K 5/50** (2013.01)

Citation (search report)
See references of WO 2008002868A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
WO 2008002868 A2 20080103; **WO 2008002868 A3 20080228**; EP 2032639 A2 20090311

DOCDB simple family (application)
US 2007072017 W 20070625; EP 07799002 A 20070625