

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 March 2001 (01.03.2001)

PCT

(10) International Publication Number
WO 01/14433 A1

- (51) International Patent Classification: C08F 8/44, C10M 159/00 (72) Inventors: HUANG, Nai, K.; 5488 Strathaven Drive, Highland Hts., OH 44143 (US). LANGE, Richard, M.; 155 East 207th Street, Euclid, OH 44123 (US).
- (21) International Application Number: PCT/US00/21834 (74) Agent: FISCHER, Joseph, P.; The Lubrizol Corporation, Patent Dept.-022B, 29400 Lakeland Boulevard, Wickliffe, OH 44092-2298 (US).
- (22) International Filing Date: 10 August 2000 (10.08.2000)
- (25) Filing Language: English (81) Designated States (national): AU, BR, JP, KR, MX, SG.
- (26) Publication Language: English (84) Designated States (regional): European patent (BE, DE, ES, FR, GB, IT, NL, SE).
- (30) Priority Data: 09/378,587 20 August 1999 (20.08.1999) US Published: — With international search report.
- (71) Applicant: THE LUBRIZOL CORPORATION [US/US]; Patent Dept.-022B, 29400 Lakeland Boulevard, Wickliffe, OH 44092-2298 (US). For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 01/14433 A1

(54) Title: METAL CONTAINING DISPERSANT POLYMERS FROM CONDENSATION OF POLYMERS CONTAINING ACIDIC GROUP WITH OVERBASED COMPOSITIONS CONTAINING REACTIVE NUCLEOPHILIC GROUP

(57) Abstract: Disclosed is a metal containing polymer composition comprising: a metal overbased imide or ester functionalized polymer prepared by reacting (A) a polymer comprising (A1) an acidic functionalized polymer or ester functionalized polymer; (A2) an acidic mixed ester-acid of a carboxy containing interpolymers; or (A3) an ester functionalized polymer comprising a lactone and (B) a metal overbased composition that contains a reactive basic functionality comprising (B1) a metal overbased amine wherein the reactive basic functionality is a primary or secondary amino group; (B2) a metal overbased hydroxy substituted carboxylic acid wherein the reactive basic functionality is a hydroxy group; or (B3) a metal overbased dispersant wherein the reactive basic functionality is a primary or secondary amino group.