

**EUROPEAN PATENT APPLICATION**

Application number: 89301935.6

Date of filing: 27.02.89

Int. Cl.<sup>5</sup>: C08G 59/62, C08G 59/64,  
 C10M 159/12, C10M 159/16,  
 C10M 145/18, C10M 149/14,  
 C10M 133/52, C10L 1/18,  
 C10L 1/22, C10L 1/24,  
 //C10N30:00, C10N30:02,  
 C10N30:04, C10N40:00,  
 C10N70:00

Priority: 29.02.88 US 161899

Date of publication of application:  
 06.09.89 Bulletin 89/36

Designated Contracting States:  
 BE DE FR GB IT NL

Date of deferred publication of the search report:  
 05.12.90 Bulletin 90/49

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**Polyepoxide modified adducts or reactants and oleaginous compositions.**

A compound useful as a dispersant additive in  
 oleaginous compositions selected from fuels and  
 lubricating oils comprising the reaction products of:

(i) at least one intermediate adduct comprised  
 of the reaction products of

(a) at least one polyepoxide, and

(b) at least one member selected from the  
 group consisting of polyamines, polyols, and amino  
 alcohols; and

(ii) at least one of (a) hydrocarbyl substituted  
 C<sub>4</sub> - C<sub>10</sub> dicarboxylic acid producing material or (b)  
 an aldehyde and a hydrocarbyl substituted hydroxy  
 aromatic compound. Also included is a process for  
 preparing said compound and an oleaginous com-  
 position containing said compound.

EP 0 331 398 A3



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number

EP 89 30 1935

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
E, L	EP-A-0 317 353 (EXXON CHEMICAL PATENTS INC.) * Whole document * Document quoted "L" for it's being considered as casting doubt on the first deposit character of US Ser. No. 161 889 and thus the validity of the (convention) priority claim ---	1-21	C 08 G 59/62 C 08 G 59/64 C 10 M 159/12 C 10 M 159/16 C 10 M 145/18 C 10 M 149/14 C 10 M 133/52 C 10 L 1/18 C 10 L 1/22
X	EP-A-0 043 934 (BASF AG) * Abstract; page 3, line 10 - page 5, lines 24, 31 - page 12, line 17; page 13, line 31 - page 14, lines 8, 28 - page 15, lines 19, 26 - page 16, line 18; examples 1,2,5-7; claims 1,3-7 * ---	1,13,15 -17	C 10 L 1/24 // (C 10 N 30/00 C 10 N 30:02 C 10 N 30:04 C 10 N 40:00 C 10 N 70:00 )
A	---	22	
X	EP-A-0 043 935 (BASF AG) * Abstract; page 1, line 10 - page 6, line 21; page 7, lines 12-26; page 8, line 14 - page 16, line 18; claims 1,3 * ---	1,13,15 -17	
A	---	22	
X	US-A-3 477 990 (M.F. DANTE et al.) * Abstract; column 1, line 28 - column 2, line 51; column 3, line 62 - column 6, line 10; column 7, line 43 - column 8, lines 60, 70 - column 9, line 37; claims 1-4,11-13 * --- -/-	1,13-16	C 10 M C 08 G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 02-10-1990	Examiner FISCHER W.H.F.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			



## CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

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## LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-21.
2. Claims 22-28.

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
D,A	US-A-3 336 241 (E.C. SHOKAL) * Abstract; column 2, line 35 - column 1, line 55; column 2, line 36 - column 5, line 70; column 7, line 61 - column 8, line 50 * ---	1	
D,A	US-A-3 386 953 (H.N. DUNNING et al.) ---		
A	US-A-4 720 350 (B.H. ZOLESKI et al.) ---		
A	EP-A-0 002 517 (BASF AG) * Abstract; claims 1-6,8,9 * ---	22	
A	US-A-3 188 362 (J. DELMONTE) * Complete * ---	22-24	
A	US-A-3 679 632 (R.G. FLOWERS et al.) * Column 1, line 15 - column 4, line 59; claims 1-4 * -----	22,25-28	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
The present search report has been drawn up for all claims			
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