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⑤④ **Hydrocarbon compositions containing polyolefin graft polymers.**

⑤⑦ Polymers having useful properties as oil additives are obtained by incorporating additional functional monomer units into oil-soluble backbone polymers having linear carbon chains, especially ethylene-propylene copolymers and ethylene-propylene-diene terpolymers.

The first functional monomers have at least one nitrogen, sulphur and/or oxygen atom in a heterocyclic ring, preferably phenothiazine or the reaction product of phenothiazine and allyl glycidyl ether.

Optionally a second amine polymer (preferably N-vinylpyrrolidone) can be grafted on to the backbone polymer.

The polymers of the invention constitute dispersant, anti-oxidant, viscosity index improvers for lubricating oils, while the polymers containing both types of monomer unit are also useful as dispersant additives for fuel oils.



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EUROPEAN SEARCH REPORT

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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)
X	US-A-4 170 561 (CHAPELET et al.) * Claims 1-10,14; columns 1-5; examples 3,6 *	1,2,4,5 7,12, 14	C 08 F 8/34 C 08 F 8/30 C 08 F 8/00 C 08 F 255/06 C 10 M 151/02 C 10 L 1/24 C 10 M 143/00 //
A	---	8-10	(C 10 M 143/00
X	EP-A-0 056 342 (SOC. FRANCAISE D'ORGANO-SYNTHESE) * Claims 1,3-9,15-18 *	1,4,7- 12,14, 16	C 10 M 133:38 C 10 M 135:36 C 10 M 143:02 C 10 M 149:10 C 10 M 151:02) (C 10 M 151/02 C 10 M 143:00 C 10 M 143:02 C 10 M 149:10) C 10 N 30:00
X	FR-A-2 416 941 (ROHM) * Whole document *	1,2,4,7 -12,14, 16	
X	US-A-3 687 849 (ABBOTT) * Claims 1-5; column 2, lines 10-24; column 2, line 55 - column 3, line 27; examples 7-9; column 4, lines 38-42 *	1-4,7, 12-14	
X	FR-A-2 437 418 (RHONE-POULENC) * Claim *	1-4,12	
P,X	EP-A-0 164 807 (AGIP) * Abstract; claims; examples *	1,3,4,8 -10,12, 14,16	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	EP-A-0 026 613 (COP. RUBBER & CHEM. CORP.) * Claims 1-13 *	1,2,4, 14	C 08 F C 10 L C 10 M
X	FR-A-2 398 795 (TEXACO) * Claim 1 *	1,2,4, 14	
X	FR-A-2 284 601 (INST. FRANCAIS DU PETROLE) * Claims *	1,4,13	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17-12-1987	Examiner DE LA MORINERIE B.M.S.B.
CATEGORY OF CITED DOCUMENTS 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			