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(54) **LUBRICANT COMPOSITIONS CONTAINING HIGH C9 DISUBSTITUTED DIPHENYLAMINE ANTIOXIDANT CONTENT**

(57) This disclosure relates to the use of di(alkyl substituted phenyl)amine antioxidants as additives in lubricant compositions having good oxidation properties in engine crankcase applications, especially in compression ignited engine and or spark ignited engine applications, where the antioxidant comprises from 0 to 10 mass% mono-C₉-alkyl substituted diphenyl amine, and

90 to 100 mass% di-C₉-alkyl substituted phenyl amines based upon the weight of the mono- and di-C₉-alkyl substituted phenyl amines, preferably where tri-C₉-alkyl substituted phenyl amines are minimized and ortho substituted di-C₉-alkyl substituted phenyl amines are minimized.

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PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 24 20 8852

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

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Place of search	Date of completion of the search	Examiner
Munich	29 April 2025	Bork, Ana-Maria
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		



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INCOMPLETE SEARCH
SHEET C

Application Number

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Claim(s) completely searchable:

1-12, 24-29

Claim(s) not searched:

13-23, 30-34

Reason for the limitation of the search:

The search has been restricted to independent claim 1 (product), claim 24 (method) and claim 25 (use) as indicated by the applicant with letter dated 23.04.2025

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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