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(54) **Linear diblock copolymers as anti-wear additives for lubricants of internal combustion engine crankcases**

(57) An internal combustion engine crankcase lubricating oil composition which reduces the cam and lifter wear has a phosphorus content of not greater than 0.09 mass %, a metal detergent additive system comprising one or more metal salts of organic carboxylic acids, and a viscosity index improver comprising a linear diblock

copolymer, one block being derived from a vinyl aromatic hydrocarbon monomer such as styrene and one block being derived from a diene monomer such as isoprene or butadiene.

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 February 2007	Examiner Glod, Guy
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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