

Title (en)
LUBRICANT COMPOSITIONS FOR DIRECT INJECTION ENGINES

Title (de)
SCHMIERMITTELZUSAMMENSETZUNGEN FÜR DIREKTEINSPRITZMOTOREN

Title (fr)
COMPOSITIONS LUBRIFIANTES POUR MOTEURS À INJECTION DIRECTE

Publication
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Application
EP 15714720 A 20150318

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Abstract (en)
[origin: WO2016148708A1] The invention is directed to a method for reducing low speed pre-ignition events in a spark-ignited direct injection internal combustion engine by supplying to the sump a lubricant composition which contains an oil of lubricating viscosity and an overbased sodium detergent. The metal overbased detergent may be selected from sulfonate detergents, phenate detergents, and salicylate detergents, especially sulfonate detergents with a metal ratio of at least 5.

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Citation (search report)
See references of WO 2016148708A1

Citation (examination)
KAZUO TAKEUCHI ET AL: "Investigation of Engine Oil Effect on Abnormal Combustion in Turbocharged Direct Injection - Spark Ignition Engines", SAE INTERNATIONAL JOURNAL OF FUELS AND LUBRICANTS, vol. 5, no. 3, 30 January 2012 (2012-01-30), pages 1017 - 1024, XP055203823, ISSN: 1946-3960, DOI: 10.4271/2012-01-1615

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