

Title (en)  
METHOD OF LUBRICATING AN INTERNAL COMBUSTION ENGINE

Title (de)  
VERFAHREN ZUM SCHMIEREN EINES VERBRENNUNGSMOTORS

Title (fr)  
PROCÉDÉ DE LUBRIFICATION D'UN MOTEUR À COMBUSTION INTERNE

Publication  
**EP 3268456 A1 20180117 (EN)**

Application  
**EP 16710605 A 20160307**

Priority

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Abstract (en)  
[origin: WO2016144880A1] The disclosed technology provides a method of lubricating a compression-ignition internal combustion engine with a maximum laden mass over 2,700 kg comprising supplying to the engine a lubricating composition comprising: an oil of lubricating viscosity, a 300 TBN or higher alkaline earth metal sulfonate detergent having a metal ratio of 10 to 40, an alkaline earth metal sulfonate detergent having a metal ratio of 3 to 9, and a TBN of 81 to 180 mg KOH/g, wherein the sulfonate detergents provide a total amount of sulfonate substrate of 1 wt % to 3 wt % of the lubricating composition, 0.1 to 1.2 wt % of antioxidant, wherein at least 20 wt % of the antioxidant is a phenolic antioxidant, a borated compound present in an amount to deliver 25 ppm to 300 ppm of boron, the lubricating composition has a sulfated ash content of 0.5 wt % to not more than 1.5 wt %, and the lubricating composition has a TBN of 6.5 to 15 mg KOH/g.

IPC 8 full level  
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