Title (en)

LUBRICATING COMPOSITION COMPRISING SULFONATE DETERGENT AND ASHLESS HYDROCARBYL PHENOLIC COMPOUND

Title (de)

SCHMIERMITTELZUSAMMENSETZUNG MIT SULFONAT-DETERGENS UND ASCHEFREIER HYDROCARBYL-PHENOL-VERBINDUNG

Title (fr)

COMPOSITION LUBRIFIANTE COMPRENANT UN DÉTERGENT À BASE DE SULFONATE ET UN COMPOSÉ PHÉNOLIQUE D'HYDROCARBYLE EXEMPT DE CENDRES

Publication

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Application

EP 17772255 A 20170914

Priority

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- US 2017051519 W 20170914

Abstract (en)

[origin: WO2018053098A1] The disclosed technology provides lubricating compositions comprising an oil of lubricating viscosity, an alkaline earth metal sulfonate detergent having a metal ratio of at least 10, in an amount to contribute 3 to 14 g KOH/kg of TBN to the lubricating composition, an ashless, sulfur free, hydrocarbyl phenolic compound in an amount of 0.4 to about 6.0 weight percent (wt%) of the composition, and an ashless dispersant; wherein the lubricating composition has total ash of 0.3 to 1.8 wt%, total detergent soap of 0.1 to 1.2 wt% and wherein the lubricating composition contains less than 0.1 wt% of a sulfur-containing phenolic detergent. The disclosed technology further relates to a method of lubricating a mechanical device (such as an internal combustion engine) with the lubricating composition. The disclosed technology further relates to the use of the of the lubricating composition in a heavy duty diesel internal combustion engine to improve control of at least one of the following (i) fuel economy, (ii) corrosion, (iii) cleanliness, and (iv) bore wear.

IPC 8 full level

C10M 169/00 (2006.01)

CPC (source: EP US)

C10M 169/00 (2013.01 - EP US); **C10M 169/044** (2013.01 - US); C10M 2203/1025 (2013.01 - EP US); C10M 2207/023 (2013.01 - EP US); C10M 2207/026 (2013.01 - EP US); C10M 2207/027 (2013.01 - EP US); C10M 2207/028 (2013.01 - EP US); C10M 2207/04 (2013.01 - EP US); C10M 2207/046 (2013.01 - EP US); C10M 2207/262 (2013.01 - EP US); C10M 2209/103 (2013.01 - EP US); C10M 2209/104 (2013.01 - EP US); C10M 2209/105 (2013.01 - EP US); C10M 2209/106 (2013.01 - EP US); C10M 2209/107 (2013.01 - EP US); C10M 2209/108 (2013.01 - EP US); C10M 2215/064 (2013.01 - EP US); C10M 2215/28 (2013.01 - EP US); C10M 2219/022 (2013.01 - EP US); C10M 2219/044 (2013.01 - EP US); C10M 2219/046 (2013.01 - EP US); C10M 2223/045 (2013.01 - EP US); C10N 2010/04 (2013.01 - EP US); C10N 2020/04 (2013.01 - EP US); C10N 2030/04 (2013.01 - EP US); C10N 2030/10 (2013.01 - EP US); C10N 2030/12 (2013.01 - EP US); C10N 2030/40 (2020.05 - EP US); C10N 2030/42 (2020.05 - EP US); C10N 2030/45 (2020.05 - EP US); C10N 2030/52 (2020.05 - EP US); C10N 2030/54 (2020.05 - EP US); C10N 2040/25 (2013.01 - EP US); C10N 2040/252 (2020.05 - EP US); C10N 2040/253 (2020.05 - EP US)

C-Set (source: EP US)

1. C10M 2209/106 + C10M 2209/108
2. C10M 2209/104 + C10M 2209/108
3. C10M 2209/107 + C10M 2209/108
4. C10M 2207/262 + C10N 2010/04

Citation (examination)

"Chemistry and Technology of Lubricants", 1 January 1992, SPRINGER, article R.M. MORTIMER ET AL: "Chemistry and Technology of Lubricants", pages: 71 - 71, XP055236788

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