

Title (en)

SULPHUR FREE COMPOSITION AND LUBRICANT COMPOSITION AND METHODS THEREOF

Title (de)

SCHWEFELFREIE ZUSAMMENSETZUNG UND SCHMIERMITTELZUSAMMENSETZUNG UND VERFAHREN DAVON

Title (fr)

COMPOSITION EXEMPT DE SOUFRE, COMPOSITION LUBRIFIANTE ET PROCEDES ASSOCIES

Publication

**EP 1587901 B1 20100616 (EN)**

Application

**EP 04704025 A 20040121**

Priority

- US 2004001442 W 20040121
- US 44151603 P 20030121

Abstract (en)

[origin: WO2004065530A2] A composition comprises a sulphur free reaction product of: (a)(i) a hydrocarbyl substituted aromatic compound containing an acidic group selected from the group consisting of a carboxylic group, a hydroxyl group and mixtures thereof; and (a)(ii) an organic nitrogen-containing base reacted with the acidic group. The composition is obtained by a preparatory process and is useful in a method for lubricating an internal combustion engine to include where the lubricant has reduced levels of sulphur, phosphorus and sulphated ash.

IPC 8 full level

**C10M 159/12** (2006.01); **C10M 129/14** (2006.01); **C10M 129/54** (2006.01); **C10M 133/02** (2006.01); **C10M 133/12** (2006.01); **C10M 133/14** (2006.01); **C10M 145/20** (2006.01); **C10M 149/14** (2006.01)

CPC (source: EP US)

**C10M 129/14** (2013.01 - EP US); **C10M 129/54** (2013.01 - EP US); **C10M 133/02** (2013.01 - EP US); **C10M 133/12** (2013.01 - EP US); **C10M 133/14** (2013.01 - EP US); **C10M 145/20** (2013.01 - EP US); **C10M 149/14** (2013.01 - EP US); **C10M 159/12** (2013.01 - EP US); **C10M 2201/06** (2013.01 - EP US); **C10M 2201/18** (2013.01 - EP US); **C10M 2207/023** (2013.01 - EP US); **C10M 2207/024** (2013.01 - EP US); **C10M 2207/08** (2013.01 - EP US); **C10M 2207/144** (2013.01 - EP US); **C10M 2209/101** (2013.01 - EP US); **C10M 2215/02** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/06** (2013.01 - EP US); **C10M 2215/14** (2013.01 - EP US); **C10M 2215/22** (2013.01 - EP US); **C10M 2215/224** (2013.01 - EP US); **C10M 2217/046** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2030/50** (2020.05 - EP US)

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