

Title (en)

LUBRICATING OIL COMPOSITION AND METHOD FOR USING LUBRICATING OIL COMPOSITION

Title (de)

SCHMIERÖLZUSAMMENSETZUNG UND VERFAHREN ZUR HERSTELLUNG DER BESAGTEN SCHMIERÖLZUSAMMENSETZUNG

Title (fr)

COMPOSITION D'HUILE LUBRIFIANTE ET PROCÉDÉ D'UTILISATION D'HUILE LUBRIFIANTE

Publication

EP 4116395 A1 20230111 (EN)

Application

EP 21763829 A 20210305

Priority

- JP 2020039404 A 20200306
- JP 2021008644 W 20210305

Abstract (en)

The task is to provide a lubricating oil composition capable of maintaining oxidation stability over a long period of time by not only making oxidation stability evaluated by an RPVOT value excellent even while using a base oil comprising a certain amount or more of tertiary carbon atom but also suppressing a rise in acid value in the initial stage. Said task is attained by providing a lubricating oil composition comprising a base oil (X) comprising tertiary carbon atom at a content of 8.0 at% or more based on the total carbon of hydrocarbons, and an antioxidant (Y) comprising an amine-based antioxidant (A), a phenol-based antioxidant (B), and a phosphor-based antioxidant (C), and satisfying the following requirements. Specifically, the amine-based antioxidant (A) comprises a diphenylamine compound (A1) having a specific structure. The phenol-based antioxidant (B) comprises a hindered phenol compound (B1) having an ester structure. Furthermore, the total content [(A1) + (B1) + (C)] of the diphenylamine compound (A1), the hindered phenol compound (B1) having an ester structure, and the phosphor-based antioxidant (C) was set to greater than 1.0 mass% and 2.0 mass% or less based on the total amount of the lubricating oil composition.

IPC 8 full level

C10M 129/10 (2006.01); **C10M 129/70** (2006.01); **C10M 129/74** (2006.01); **C10M 133/12** (2006.01); **C10M 137/00** (2006.01); **C10M 137/12** (2006.01); **C10N 30/10** (2006.01); **C10N 40/02** (2006.01); **C10N 40/04** (2006.01); **C10N 40/08** (2006.01); **C10N 40/12** (2006.01)

CPC (source: EP US)

C10M 101/025 (2013.01 - US); **C10M 129/70** (2013.01 - EP); **C10M 129/76** (2013.01 - US); **C10M 133/12** (2013.01 - US); **C10M 137/04** (2013.01 - US); **C10M 137/12** (2013.01 - US); **C10M 141/10** (2013.01 - EP US); **C10M 169/04** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP); **C10M 2205/143** (2013.01 - EP); **C10M 2207/026** (2013.01 - EP); **C10M 2207/283** (2013.01 - EP); **C10M 2207/284** (2013.01 - US); **C10M 2215/064** (2013.01 - EP); **C10M 2215/065** (2013.01 - EP); **C10M 2215/223** (2013.01 - EP); **C10M 2215/26** (2013.01 - US); **C10M 2223/04** (2013.01 - EP US); **C10M 2223/047** (2013.01 - EP); **C10M 2223/06** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2040/08** (2013.01 - EP US); **C10N 2040/12** (2013.01 - EP); **C10N 2040/135** (2020.05 - US); **C10N 2040/30** (2013.01 - US)

C-Set (source: EP)

C10M 2203/1025 + **C10N 2020/02**

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Designated extension state (EPC)

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