

Title (en)

Marine diesel engine lubricating compositions

Title (de)

Schmiermittelzusammensetzungen zum Schmieren eines Schiffsdieselmotors

Title (fr)

Compositions lubrifiantes pour la lubrification d'un moteur diesel marin

Publication

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Application

EP 00201236 A 20000404

Priority

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Abstract (en)

A lubricating oil composition comprises a major amount of an oil of lubricating viscosity to which is added a minor amount of an oil soluble ashless dispersant, an oil soluble overbased metal detergent, an oil soluble sulfur and/or phenolic antioxidant and/or aromatic amine anti-oxidant. A lubricating oil composition (I) comprises a major amount of an oil of lubricating viscosity to which is added a minor amount of an oil soluble ashless dispersant, an oil soluble overbased metal detergent, an oil soluble sulfur and/or phenolic antioxidant and/or aromatic amine anti-oxidant. The surfactant system of the metal detergent is derived from at least one or at least two different surfactants (preferably a salicylate). The total base number of the composition is at least 10 (preferably at least 20) and the viscosity index is at least 90 (preferably at least 100, especially at least 105). An independent claim is also included for lubricating a marine diesel engine by supplying (I) to the engine. A lubricating oil composition for a marine diesel engine comprises a major amount of an oil of lubricating viscosity and minor amounts of (a) an oil-soluble ashless dispersant (b) an oil-soluble overbased metal detergent whose surfactant system is derived from one or more surfactants, said one surfactant being a salicylate, such as at least two different surfactants; and (c1) a first oil-soluble anti-oxidant being sulfur-containing or phenolic or both, and/or (c2) an oil-soluble aromatic amine anti-oxidant.

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IPC 8 full level

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C10M 2219/046 (2013.01 - EP); C10M 2219/066 (2013.01 - EP); C10M 2219/068 (2013.01 - EP); C10M 2219/083 (2013.01 - EP);
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Citation (search report)

- [XY] EP 0725129 A2 19960807 - LUBRIZOL CORP [US]
- [Y] EP 0686689 A2 19951213 - NIPPON OIL CO LTD [JP]
- [Y] WO 9746643 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al
- [A] US 5744430 A 19980428 - INOUE KIYOSHI [JP], et al
- [A] EP 0662508 A2 19950712 - BP CHEMICALS ADDITIVES [GB]
- [A] US 4681694 A 19870721 - ZOLESKI BENJAMIN H [US], et al

Cited by

EP1191088A1; SG103317A1; EP1229102A1; EP1486556A1; EP1209218A1; SG112817A1; EP1209219A1; SG126767A1; AU2004202588B2;
EP1229101A1; SG105535A1; EP1236792A1; EP1728849A1; AU2006202228B2; AU2006202228A8; AU2006202228B8; US6660697B2;
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