

Title (en)  
LUBRICATION OIL COMPOSITION

Title (de)  
SCHMIERÖLZUSAMMENSETZUNG

Title (fr)  
COMPOSITION D'HUILE DE LUBRIFICATION

Publication  
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Application  
**EP 12843194 A 20121024**

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Abstract (en)  
[origin: EP2772525A1] The present invention provides a lubricating oil composition having an extremely high viscosity index and a low coefficient of traction as a low coefficient of fluid friction in an elastohydrodynamic lubrication which is excellent in saving of energy and reduction in fuel consumption. The lubricating oil composition according to the present invention includes the following components (A) and (B): (A) a low-viscosity synthetic oil comprising a compound containing ether bond(s) in a molecule thereof and having a kinematic viscosity of less than 10 mm<sup>2</sup>/s as measured at 40°C, in which a ratio of the number of oxygen atoms to the number of carbon atoms as constituents of the compound (O/C ratio) and the kinematic viscosity (mm<sup>2</sup>/s) of the compound as measured at 40°C satisfy the following formula (1): Kinematic Viscosity at 40°C # $\mu$  12 - [(O/C ratio) x 30] (1); and (B) a high-viscosity synthetic oil as a hydrocarbon-based synthetic oil having a kinematic viscosity of 40 mm<sup>2</sup>/s or more as measured at 100°C which includes at least one compound selected from the group consisting of an  $\pm$ -olefin oligomer, a hydrogenated  $\pm$ -olefin oligomer and an ethylene-propylene co-oligomer.

IPC 8 full level  
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• [X] US 2005059563 A1 20050317 - SULLIVAN WILLIAM T [US], et al  
• [A] US 2010105589 A1 20100429 - LEE GORDON H [US], et al  
• See references of WO 2013062008A1

Cited by  
EP2873721A4; US9624453B2

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