

Title (en)
LUBRICANT COMPOSITION

Title (de)
SCHMIERMITTELZUSAMMENSETZUNG

Title (fr)
COMPOSITION LUBRIFIANTE

Publication
EP 3578624 A4 20200122 (EN)

Application
EP 18748169 A 20180201

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• JP 2017016661 A 20170201
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Abstract (en)
[origin: EP3578624A1] The purpose of the present invention is to provide a lubricant composition which, in a sliding member, is interposed between a DLC-coated surface and another metal member (in particular, a steel material), the lubricant composition having good wear resistance as well as having a better friction reducing effect than conventional molybdenum friction modifier-containing lubricant compositions. The present invention provides a lubricant composition characterized by containing a lubricating base oil, (A) molybdenum dialkyl dithiophosphate, and (B) zinc dialkyl dithiophosphate, wherein the amount of phosphorus with respect to the total mass of the lubricant composition is 300-1500 mass ppm.

IPC 8 full level
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Citation (search report)
• [X] JP 2002129182 A 20020509 - NIPPON MITSUBISHI OIL CORP
• [X] US 6329328 B1 20011211 - KOGANEI KATSUYA [JP], et al
• [X] JP 2000053991 A 20000222 - IDEMITSU KOSAN CO
• [X] US 2015218483 A1 20150806 - TAKABE SHINICHI [JP], et al
• [X] US 5858931 A 19990112 - TANAKA NORIYOSHI [JP], et al
• [X] US 4925596 A 19900515 - MAEDA YOSHIHIRO [JP], et al
• [X] JP 2013035973 A 20130221 - NTN TOYO BEARING CO LTD
• [ID] JP 2016216653 A 20161222 - JX NIPPON OIL & ENERGY CORP
• [XP] WO 2017146232 A1 20170831 - IDEMITSU KOSAN CO [JP]
• See references of WO 2018143365A1

Cited by
EP4083173A4

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