

Title (en)
Lubricant with enhanced energy efficiency

Title (de)
Schmiermittel mit erweiterter Energieeffizienz

Title (fr)
Lubrifiant doté d'une efficacité énergétique améliorée

Publication
EP 2345710 A1 20110720 (EN)

Application
EP 10000403 A 20100118

Priority
EP 10000403 A 20100118

Abstract (en)
Lubricant compositions useful especially for the lubrication of gears, having a boundary loss coefficient X LG of 0.6 to 0.8 measured at temperatures of 40 to 120 °C with a modified method according to DIN 51354, whereby the lubricant composition contains of a base oil a optional additives, whereby the base oil is selected from complex ester, said, said complex ester having a kinematic viscosity at 40 °C of greater than 400 and up to 50 000 mm² /s.

IPC 8 full level
C10M 105/42 (2006.01); **C10M 111/02** (2006.01); **C10N 20/02** (2006.01); **C10N 30/06** (2006.01); **C10N 40/04** (2006.01); **C10N 40/08** (2006.01)

CPC (source: EP KR US)
C10M 105/42 (2013.01 - EP KR US); **C10M 111/00** (2013.01 - EP US); **C10M 111/02** (2013.01 - KR); **C10M 2203/1006** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP US); **C10M 2207/301** (2013.01 - EP US); **C10M 2209/1033** (2013.01 - EP US); **C10M 2219/00** (2013.01 - EP US); **C10M 2223/00** (2013.01 - EP US); **C10N 2020/02** (2013.01 - EP KR US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2040/04** (2013.01 - EP KR US)

Citation (applicant)
• EP 2027234 A2 20090225 - COGNIS IP MAN GMBH [DE]
• WO 2005019395 A1 20050303 - COGNIS CORP [US], et al

Citation (search report)
• [XI] WO 2007144079 A2 20071221 - COGNIS IP MAN GMBH [DE], et al
• [X] US 2003125218 A1 20030703 - CARDIS ANGELINE BAIRD [US], et al
• [X] WO 9916849 A1 19990408 - UNICHEMA CHEMIE BV [NL], et al
• [A] US 2006276355 A1 20061207 - CAREY JAMES T [US], et al

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RU2726194C2; US2015119305A1; WO2017016825A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2345710 A1 20110720; AU 2011206740 A1 20120712; BR 112012017719 A2 20160419; CA 2785357 A1 20110721; CN 102844416 A 20121226; JP 2013517338 A 20130516; KR 20120125251 A 20121114; MX 2012008136 A 20120803; US 2012295827 A1 20121122; WO 2011085969 A1 20110721

DOCDB simple family (application)
EP 10000403 A 20100118; AU 2011206740 A 20110112; BR 112012017719 A 20110112; CA 2785357 A 20110112; CN 201180006477 A 20110112; EP 2011000095 W 20110112; JP 2012548375 A 20110112; KR 20127018216 A 20110112; MX 2012008136 A 20110112; US 201113522645 A 20110112