

Title (en)

USE OF ALKYLPHENOL-ALDEHYDE RESINS FOR MAKING MINERAL OIL WITH IMPROVED CONDUCTIVITY AND COLD FLOWABILITY

Title (de)

VERWENDUNG VON ALKYLPHENOL-ALDEHYDHARZEN ZUR HERSTELLUNG VON MINERALÖLEN MIT VERBESSERTER LEITFÄHIGKEIT UND KÄLTEFLIESSFÄHIGKEIT

Title (fr)

UTILISATION DE RÉSINES D'ALKYLPHÉNOL-ALDÉHYDE POUR LA PRODUCTION D'HUILES MINÉRALES À CONDUCTIVITÉ ET ÉCOULEMENT À FROID AMÉLIORÉS

Publication

EP 1749874 B1 20180404 (DE)

Application

EP 06013804 A 20060704

Priority

DE 102005035275 A 20050728

Abstract (en)

[origin: EP1749874A2] Improving the electrical conductivity of mineral oil distillate having water content of less than 150 ppm, involves adding a composition which comprises at least one alkylphenolaldehyde resin and 0.10-10 pbw at least one polar oil-soluble nitrogen compound, based on the alkylphenol-aldehyde resin, in such an amount that the mineral oil distillate has a conductivity of at least 50 pS/m. Improving the electrical conductivity of mineral oil distillate having water content of less than 150 ppm, involves adding a composition which comprises at least one alkylphenolaldehyde resin having formula (A) and 0.10-10 pbw at least one polar oil-soluble nitrogen compound, based on the alkylphenol-aldehyde resin, in such an amount that the mineral oil distillate has a conductivity of at least 50 pS/m. R 5>1-200C alkyl or 2-200C alkenyl, O-R 6> or O-C(O)-R 6>; R 6>1-200C-alkyl or 2-200C-alkenyl; n : 2-100. Independent claims are also included for: (1) improving the electrical conductivity of mineral oil distillate having a water content of less than 150 ppm, and comprising 0.1-200 ppm of at least one polar, oil-soluble nitrogen compound, comprising adding to the mineral oil distillate 0.1-200 ppm of at least one alkylphenol-aldehyde resin (A), so that the mineral oil distillate have a conductivity of at least 50 pS/m; and (2) mineral oil distillate having an aromatics content of less than 21 wt.%, a water content of less than 150 ppm, and a conductivity of at least 50 pS/m, and comprising 0.1-200 pm of at least one alkylphenol-aldehyde resin (A). [Image].

IPC 8 full level

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Cited by

EP1985685A1; WO2008107371A3; US8551365B2; US8858838B2; US10062471B2; EP4074810B1

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