Title (en)

BIODEGRADABLE FUNCTIONAL FLUID FOR MECHANIC DRIVES

Title (de)

BIOLOGISCH ABBAUBARE FUNKTIONSFLÜSSIGKEIT FÜR MECHANISCHE ANTRIEBE

Title (fr)

LIQUIDE FONCTIONNEL BIODEGRADABLE POUR ENTRAINEMENTS MECANIQUES

Publication

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Application

EP 01985265 A 20010920

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- DE 0103672 W 20010920
- DE 10049175 A 20000922

Abstract (en)

[origin: WO0224841A2] The invention relates to a water-based biodegradable functional fluid for mechanical drives, preferably for use in steam engines. The aim of the invention is to create functional fluids for use in mechanical drives, particularly for hydrodynamically lubricating plain bearings, preferably for crankshafts of superheated steam engines having customary non-overly precise bearing play. The inventive fluids should be able to be used in closed power pack systems also in the existence of sump temperatures exceeding 120 DEG C, e.g. in the lubricant pan located under a crank drive and be water-based or able to be diluted with water. According to the invention, this is achieved by a percentually low addition of polyaspartic acid to water or to water-glycol mixtures, whereby polyaspartic acid having a molar mass greater than 1,000 and up to 10,000 g/mol is preferably used.

[origin: WO0224841A2] The invention relates to a water-based biodegradable functional liquid for mechanical drives, preferably for use in steam engines. The aim of the invention is to create functional liquids for use in mechanical drives, particularly for hydrodynamically lubricating plain bearings, preferably for crankshafts of superheated steam engines having customary non-overly precise bearing play. The inventive liquids should be able to be used in closed power pack systems also in the existence of sump temperatures exceeding 120 DEG C, e.g. in the lubricant pan located under a crank drive and be water-based or able to be diluted with water. According to the invention, this is achieved by a percentually low addition of polyaspartic acid to water or to water-glycol mixtures, whereby polyaspartic acid having a molar mass ranging from 1,000 to 10,000 g/mol is preferably used.

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IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 0224841A2

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