

Title (en)
Use of polymers as anti-misting additives in waterbased coolant lubricants

Title (de)
Verwendung von Polymeren als Anti-Nebel-Additiv in wasserbasierenden Kühlschmierstoffen

Title (fr)
Utilisation de polymères comme additifs anti-embruns dans les lubrifiants aqueux de refroidissement

Publication
EP 1067168 A1 20010110 (DE)

Application
EP 00113201 A 20000621

Priority
DE 19931220 A 19990706

Abstract (en)
Copolymers with units derived from acrylamide (I) and alkali metal acrylamido alkylsulfonate (II) are used in amounts of 0.01-2 wt.% to prevent mist formation in water-based cooling lubricants. Copolymers with units derived from acrylamide (I) and alkali metal alkali metal acrylamido alkylsulfonate (II) of the given formulae are used in amounts of 0.01-2 wt.% to prevent mist formation in water-based cooling lubricants; R<1> = hydrogen (H) or 1-4 carbon (C) alkyl; R<2> = branched or linear 1-6 C alkylene; Y = an alkali metal. An Independent claim is also included for water-based cooling lubricants containing 0.01-2 wt.% of this copolymer in addition to the usual base materials and optionally functional additives.

Abstract (de)
Gegenstand der Erfindung ist die Verwendung von Copolymeren, welche Struktureinheiten enthalten, die sich aus den Verbindungen der Formeln 1 und 2 ableiten <IMAGE> worin R<1>: H oder C1-C4-Alkyl; R<2>: einen verzweigten oder unverzweigten C1-C6-Alkylrest; Y: ein Alkalimetall oder Ammonium bedeuten, zur Verhinderung der Nebelbildung in wasserbasierenden Kühlschmierstoffen.

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IPC 8 full level
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Citation (search report)
• [XY] GB 2142649 A 19850123 - KAO CORP
• [YD] EP 0811677 A2 19971210 - LUBRIZOL CORP [US]
• [XY] EP 0311799 A1 19890419 - AMERICAN CYANAMID CO [US]
• [PX] WO 9966004 A1 19991223 - LUBRIZOL CORP [US]
• [XY] EP 0483638 A1 19920506 - HOECHST AG [DE]
• [X] US 5693698 A 19971202 - PATEL BHARAT B [US], et al
• [Y] US 4563294 A 19860107 - GEYMAYER PETER [DE], et al
• [X] US 4309523 A 19820105 - ENGELHARDT FRIEDRICH, et al
• [Y] US 4536539 A 19850820 - LUNDBERG ROBERT D [US], et al

Cited by
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