

Title (en)
ENVIRONMENTALLY FRIENDLY DE-ICER AND ANTI-ICER COMPOSITIONS

Title (de)
UMWELTFREUNDLICHE ENTEISUNGS- UND AUFTAUZUSAMMENSETZUNGEN

Title (fr)
COMPOSITIONS DEGIVRANTES ET ANTIGIVRANTES ECOLOGIQUES

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Application
EP 00973654 A 20001018

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Abstract (en)
[origin: WO0146334A1] The present invention relates to an ice control formulation comprising at least one freezing point depressant and an enzyme system that is capable of degrading the freezing point depressant. In certain embodiments the ice control formulation further comprises a surfactant and anti-corrosion agents. Certain anti-icing formulations further comprise a thickener.

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Citation (search report)
• [X] US 5772912 A 19980630 - HASLIM LEONARD A [US], et al
• [X] EP 0257720 A2 19880302 - UNION CARBIDE CANADA LTD [CA]
• [X] US 5273673 A 19931228 - ASHRAWI SAMIR S [US], et al
• [A] EP 0221269 A2 19870513 - LANG CHEM TECH PROD [AT]
• [A] ANONYMOUS: "Aircraft de-icer", RESEARCH DISCLOSURE, MASON PUBLICATIONS, HAMPSHIRE, GB, vol. 252, no. 46, April 1985 (1985-04-01), XP007109854, ISSN: 0374-4353
• See references of WO 0129146A1

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