

Title (en)  
ELECTRICAL INSULATING FLUID

Title (de)  
Elektrisch isolierende Flüssigkeit

Title (fr)  
FLUIDE D'ISOLATION ELECTRIQUE

Publication  
**EP 1141167 A4 20020626 (EN)**

Application  
**EP 99965203 A 19991210**

Priority  
• GB 9827207 A 19981211  
• US 9929265 W 19991210

Abstract (en)  
[origin: WO0034409A1] This invention relates to electrical insulating fluids especially for use in transformers and which have excellent low temperature performance. The electrical insulating fluid comprises esters with 17 to 20 carbon atoms formed by the reaction of a saturated monobasic carboxylic acid and a saturated monohydric alcohol. Suitable esters include n-decyl 2-ethyl hexanoate, 2-ethyl hexyl 3,5,5-trimethyl hexanoate, isodecyl 2-ethyl hexanoate, isodecyl isooctanoate, isodecyl 3,5,5-trimethyl hexanoate and n-octyl/n-decyl 2-ethyl hexanoate. In addition to the ester, the electrical insulating fluid may contain as an additive, a stabiliser against oxidation. Suitable additives include an antioxidant such as a hindered phenol and a metal passivator such as a benzotriazole or a derivative thereof.

IPC 1-7  
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IPC 8 full level  
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Citation (search report)  
• [XY] US 3740625 A 19730619 - ROSS S, et al  
• [XY] DE 2326225 A1 19740110 - EXXON RESEARCH ENGINEERING CO  
• [YD] FR 2282467 A1 19760319 - RHONE POULENC IND [FR]  
• [Y] GB 2110234 A 19830615 - CIBA GEIGY AG  
• [Y] WO 9831021 A1 19980716 - ABB POWER T & D CO [US]  
• [A] US 5322633 A 19940621 - SENARATNE K PUSHPANANDA A [US], et al  
• See references of WO 0034409A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
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