

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
20 June 2024 (20.06.2024)



(10) International Publication Number  
**WO 2024/126069 A1**

(51) International Patent Classification:  
*C09K 5/10* (2006.01) *H01M 10/613* (2014.01)

(21) International Application Number:  
PCT/EP2023/083754

(22) International Filing Date:  
30 November 2023 (30.11.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
22212971.0 13 December 2022 (13.12.2022) EP

(71) Applicant: **EVONIK OPERATIONS GMBH** [DE/DE];  
Rellinghauser Strasse 1-11, 45128 Essen (DE).

(72) Inventors: **JOVIC, Kristina**; 33 Jurong West Street 41,  
Apartment #06-57 Tower 3E, The LAKESHORE, Singa-  
pore 649413 (SG). **WILKENS, Roland**; Alte Landstrasse  
3, 64579 Gernsheim (DE). **HILF, Stefan**; Auf der Tuchble-  
iche 4, 64673 Zwingenberg (DE).

(74) Agent: **EVONIK PATENT ASSOCIATION**; c/o Evonik  
Industries AG, Function Legal - IP Management, Bau  
1042A, PB15, Paul-Baumann-Strasse 1, 45772 Marl (DE).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,  
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,  
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,  
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,  
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,  
MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA,  
NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,  
RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,  
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, CV,  
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,  
SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ,  
RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ,  
DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,  
LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE,  
SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) Title: METHOD OF COOLING AN ELECTRICAL EQUIPMENT SYSTEM BY USING A DIELECTRIC FLUID COM-  
POSITION HAVING GOOD HEAT DISSIPATION OVER A WIDE TEMPERATURE RANGE

(57) Abstract: The invention relates to a method of cooling an electrical equipment system by using a dielectric fluid composition  
comprising a base fluid comprising hydrogenated oligomers obtained from the oligomerization of butene. The method according to the  
invention provides good and consistent heat dissipation of the electrical equipment system over a wide temperature range.



WO 2024/126069 A1