

Title (en)  
QUENCHING COOLANT

Title (de)  
ABSCHRECKMITTEL

Title (fr)  
LIQUIDE DE REFROIDISSEMENT

Publication  
**EP 3751012 A1 20201216 (EN)**

Application  
**EP 19460032 A 20190611**

Priority  
EP 19460032 A 20190611

Abstract (en)  
The subject of the invention is a quenching coolant used in the processes of heat treatment of steel, in particular in the processes of quenching of steel with low hardening capacity, as well as for hyperquenching of other metals and their alloys. Quenching coolant according to the invention, characterized in it containing from 0.001 to 2.0% by weight of carboxymethylcellulose NaCMC (sodium salt of cellulose glycolic acid), advantageously 0.5% by weight, and contains water in an amount making up to 100% by weight.

IPC 8 full level  
**C21D 1/60** (2006.01)

CPC (source: EP)  
**C21D 1/60** (2013.01)

Citation (applicant)  

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- T. HOLMP. OLSSONE. TROELL: "A Handbook", 2012, SWEREA IVF, article "Steel and its Heat Treatment"
- L. MANDELKERN: "Crystallization of Polymers", 2002, CAMBRIDGE UNIVERSITY PRESS

Citation (search report)  

- [Y] CN 104263886 A 20150107 - CHINA PETROLEUM & CHEMICAL
- [Y] US 2017247633 A1 20170831 - HASEGAWA MAYU [JP], et al
- [Y] CN 108300924 A 20180720 - JINJIANG XINCHENG VEHICLE PARTS CO LTD
- [XYI] ZAKHAROV A V ET AL: "STUDY OF THE POSSIBILITIES OF USING POLYMER AGENT NA-CARBOXYMETHYL CELLULOSE FOR QUENCHING RAILS AND RAIL FASTENING COMPONENTS", METAL SCIENCE AND HEAT TREATMENT, SPRINGER, NEW YORK, NY, US, vol. 33, no. 3 / 04, 1 March 1991 (1991-03-01), pages 294 - 299, XP000272876, ISSN: 0026-0673, DOI: 10.1007/BF00776438

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