

Title (en)  
COOLING APPARATUS FOR A SYNTHETIC THREAD

Title (de)  
KÜHLVORRICHTUNG FÜR EINEN SYNTHETISCHEN FADEN

Title (fr)  
DISPOSITIF DE REFROIDISSEMENT POUR FIL SYNTHÉTIQUE

Publication  
**EP 3538697 B1 20210224 (DE)**

Application  
**EP 17793961 A 20171106**

Priority  
• DE 102016013519 A 20161111  
• EP 2017078334 W 20171106

Abstract (en)  
[origin: WO2018087042A1] A description is given of a cooling apparatus for a synthetic thread, in particular a twisted thread, within a texturing zone. The cooling apparatus has an elongate cooling body with a cooling groove which is open on a guiding side. A metering opening in the base of the groove connects the cooling groove to a metering device for supplying a cooling liquid. In order to achieve reliable thread guidance and intensive cooling of the thread, despite the dynamics of the twisted thread itself, the invention provides for the cooling groove to have a groove cross section which is subdivided into a plurality of partial cross sections and in the case of which the groove flanks in at least one of the partial cross sections (guiding cross section) are parallel to one another or inclined in each case at an opening angle of less than 15°.

IPC 8 full level  
**D02J 13/00** (2006.01)

CPC (source: EP)  
**D02J 13/001** (2013.01); **D02J 13/003** (2013.01); **D02J 13/008** (2013.01)

Citation (examination)  
• WO 2018065123 A1 20180412 - OERLIKON TEXTILE GMBH & CO KG [DE]  
• WO 2017089191 A1 20170601 - OERLIKON TEXTILE GMBH & CO KG [DE]  
• EP 3312321 A1 20180425 - OERLIKON TEXTILE GMBH & CO KG [DE]  
• EP 3312322 A1 20180425 - OERLIKON TEXTILE GMBH & CO KG [DE]  
• WO 2018059743 A1 20180405 - OERLIKON TEXTILE GMBH & CO KG [DE]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2018087042 A1 20180517**; CN 109963970 A 20190702; CN 109963970 B 20220211; EP 3538697 A1 20190918; EP 3538697 B1 20210224

DOCDB simple family (application)  
**EP 2017078334 W 20171106**; CN 201780070004 A 20171106; EP 17793961 A 20171106