Title (en)

DEVICE FOR COOLING A HEATED THREAD

Title (de)

VORRICHTUNG ZUM KÜHLEN EINES ERWÄRMTEN FADENS

Title (fr)

DISPOSITIF DE REFROIDISSEMENT D'UN FIL CHAUFFÉ

Publication

**EP 3312322 B1 20190522 (DE)**

Application

**EP 17195863 A 20171011**

Priority

DE 102016012519 A 20161019

Abstract (en)

[origin: JP2018066105A] PROBLEM TO BE SOLVED: To provide a device for cooling a yarn by which the yarn can be sufficiently cooled with a cooling liquid in an amount as small as possible.SOLUTION: In a device for cooling a heated yarn, comprising a cooling body 1, the cooling body 1 comprises a longitudinally long cooling groove 2 for guiding the yarn. The cooling groove 2 is connected to a metering device 5 via a metering opening in groove bottom parts 4.1 and 4.2 for supplying a cooling liquid. In order to cool the yarn with a small amount of the cooling liquid without an excess amount of the cooling liquid, the cooling groove 2 comprises: a plurality of guide parts 6.1 each comprising the groove bottom part 4.1 with corrugated grooves; and at least one guide part 6.2 comprising the smooth groove bottom part 4.2. The plurality of guide parts 6.1 and the at least one guide part 6.2 are alternately formed one behind the other. A metering opening 3 is arranged, in an inlet region 20 of the cooling groove, upstream of one guide part 6.1 of the guide parts 6.1 each comprising the groove bottom part 4.1 with the corrugated grooves.SELECTED DRAWING: Figure 1

IPC 8 full level

**D02J 13/00** (2006.01)

CPC (source: CN EP)

**D02J 13/001** (2013.01 - CN EP); **D02J 13/003** (2013.01 - EP); **D02J 13/008** (2013.01 - EP)

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