

Title (en)
DEVICE FOR COOLING LONG OBJECTS

Title (de)
VORRICHTUNG ZUM KÜHLEN VON LANGEN GEGENSTÄNDEN

Title (fr)
DISPOSITIF SERVANT A REFROIDIR DES OBJETS OBLONGS

Publication
EP 1809775 B1 20090114 (DE)

Application
EP 05797187 A 20051025

Priority
• EP 2005011447 W 20051025
• DE 102004054627 A 20041111

Abstract (en)
[origin: US2007289678A1] The invention relates to a device for cooling long objects such as wires, tubes or rods. In order to provide improved cooling, provision is made of a nozzle region which has a diameter greater than the diameter of the object and contains a plurality of nozzles which blow a cooling gas at the object, and a cladding tube whose diameter is equal to or less than the diameter of the nozzle region.

IPC 8 full level
C21D 1/00 (2006.01)

CPC (source: EP US)
C21D 1/19 (2013.01 - EP US); **C21D 1/20** (2013.01 - EP US); **C21D 9/40** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2007289678 A1 20071220; US 7497984 B2 20090303; AT E420979 T1 20090115; BR PI0517300 A 20081007; BR PI0517300 B1 20141104; DE 102004054627 A1 20060518; DE 502005006494 D1 20090305; EP 1809775 A2 20070725; EP 1809775 B1 20090114; ES 2321120 T3 20090602; WO 2006050814 A2 20060518; WO 2006050814 A3 20071213

DOCDB simple family (application)
US 80145507 A 20070510; AT 05797187 T 20051025; BR PI0517300 A 20051025; DE 102004054627 A 20041111; DE 502005006494 T 20051025; EP 05797187 A 20051025; EP 2005011447 W 20051025; ES 05797187 T 20051025