

Title (en)
Filament cooler

Title (de)
Filamentkühler

Title (fr)
Refroidisseur de filaments

Publication
EP 2392698 A1 20111207 (EN)

Application
EP 11166876 A 20110520

Priority
JP 2010128680 A 20100604

Abstract (en)

Inside a quench box 22 are formed a cooling tube housing chamber 41, an upper connection path 42, and a lower connection path 43. The cooling tube housing chamber 41 houses therein a plurality of cooling tubes 21 to oppose spinnerets 13 of a spinning beam 2, and these cooling tubes 21 are arranged to form two rows in the crosswise direction in a staggered manner. The cooling tube housing chamber 41 has, at the lower end portions of wall surfaces 41a and 41b, a first connection port 45 and a second connection port 46. The first connection port 45 is connected to an upper connection path 42 which is connected to a duct 60 and extends in the crosswise direction. The second connection port 46 is connected to a lower connection path 43 which is provided below the upper connection path 42, is connected to the duct 60, and extends along the lower part of the cooling tube housing chamber 41.

IPC 8 full level
D01D 5/092 (2006.01)

CPC (source: EP)
D01D 5/092 (2013.01)

Citation (applicant)
JP 3868404 B2 20070117

Citation (search report)

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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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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JP 5596422 B2 20140924

DOCDB simple family (application)
EP 11166876 A 20110520; CN 201110140074 A 20110527; JP 2010128680 A 20100604