

Title (en)

INDUCTION HEATING ROLLER AND SPUN YARN DRAWING DEVICE

Title (de)

INDUKTIONSHEIZWALZE UND SPINNFADENZIEHVORRICHTUNG

Title (fr)

ROULEAU DE CHAUFFAGE PAR INDUCTION ET DISPOSITIF D'ÉTIRAGE DE FILÉ

Publication

EP 3917282 A1 20211201 (EN)

Application

EP 21172242 A 20210505

Priority

JP 2020092517 A 20200527

Abstract (en)

An object of the present invention is to effectively reduce the temperature dispersion of a cylindrical portion of a roller main body in the axial direction of an induction heating roller. An induction heating roller 20 includes a rotatable roller unit 30 and a coil 52. A roller unit 30 includes an outer cylindrical portion 34 (cylindrical portion) extending in an axial direction of the roller unit 30, a roller main body 31 in which the outer cylindrical portion 34 is induction-heated when a current flows in the coil 52, a heat equalizing member 32 which is able to transfer the heat generated in the outer cylindrical portion 34 in the axial direction and which more easily transfers the heat in the axial direction than the outer cylindrical portion 34 does, and a heat generating member 60 which is provided at an end portion of the outer cylindrical portion 34 in the axial direction and which is induction-heated when a current flows in the coil 52. The heat generating member 60 is made of a material which is lower in electric resistivity than a material forming the outer cylindrical portion 34 and a material forming the heat equalizing member 32. The heat generating member 60 is provided to be adjacent to at least one of the outer cylindrical portion 34 and the heat equalizing member 32.

IPC 8 full level

H05B 6/14 (2006.01); **D02J 13/00** (2006.01)

CPC (source: CN EP)

D01D 5/16 (2013.01 - CN); **D01D 10/02** (2013.01 - CN); **D01D 13/00** (2013.01 - CN); **D02J 1/224** (2013.01 - EP); **D02J 13/005** (2013.01 - EP);
H05B 6/145 (2013.01 - CN EP)

Citation (applicant)

- JP 2018035488 A 20180308 - TMT MACHINERY INC
- JP H1031379 A 19980203 - MINOLTA CO LTD

Citation (search report)

- [IA] WO 2019077899 A1 20190425 - TMT MACHINERY INC [JP]
- [IA] WO 2019163314 A1 20190829 - TMT MACHINERY INC [JP]
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- [IA] WO 2019077914 A1 20190425 - TMT MACHINERY INC [JP]

Citation (third parties)

- Third party : Anonymous
- EP 3700302 A1 20200826 - TMT MACHINERY INC [JP]
 - JP S4897134 A 19731211
 - JP S5551836 A 19800415 - TEIJIN LTD
 - JP S5615758 Y2 19810413
 - JP S5733679 B2 19820719
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 - JP S6157677 B2 19861208

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)

EP 3917282 A1 20211201; CN 113747621 A 20211203; JP 2021190420 A 20211213

DOCDB simple family (application)

EP 21172242 A 20210505; CN 202110493700 A 20210507; JP 2021074875 A 20210427