Title (en)

Yarn heater

Title (de)

Garnheizer

Title (fr)

Dispositif pour le chauffage de fil

Publication

EP 2505699 A1 20121003 (EN)

Application

EP 12160978 A 20120323

Priority

JP 2011078917 A 20110331

Abstract (en)

By improving the heat insulating efficiency in thermal insulation box, the power consumption of a heater for heating yarns fed from the yarn feeding roller is decreased. A roller unit 3 includes a godet roller 11, a separate roller 12, a thermal insulation box 13 housing the rollers 11 and 12, and a heat exchanger 30 provided outside the thermal insulation box 13. The heat exchanger 30 operates such that, as an exhaust fan 40 is driven, the air in the thermal insulation box 13 is exhausted through an inner tube 31. As an intake fan 41 is driven, the outside air passes through an outer tube 32 and then flows into the thermal insulation box 13 through a branched tube 34. At this stage, the heat exchanger 30 conducts heat exchange between the air running in the inner tube 31 and the air running in the outer tube 32.

IPC 8 full level

D02J 13/00 (2006.01); **D01D 10/02** (2006.01)

CPC (source: EP)

D01D 10/02 (2013.01); **D02J 13/005** (2013.01)

Citation (applicant)

- JP 2007077547 A 20070329 - TORAY INDUSTRIES
- JP 2001262429 A 20010926 - MURATA MACHINERY LTD

Citation (search report)

- [XP] EP 2415915 A1 20120208 - TMT MACHINERY INC [JP]
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- [A] SU 1432105 A1 19881023 - VNII SINT VOLOKNA [SU]
- [A] US 3161484 A 19641215 - ENO BAGNOLI, et al
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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)

EP 2505699 A1 20121003; **EP 2505699 B1 20130911**; CN 102733021 A 20121017; CN 102733021 B 20160817; JP 2012214913 A 20121108; JP 5580242 B2 20140827

DOCDB simple family (application)

EP 12160978 A 20120323; CN 201210090984 A 20120330; JP 2011078917 A 20110331