

Title (en)
YARN HEATER

Title (de)
GARNHEIZELEMENT

Title (fr)
DISPOSITIF DE CHAUFFAGE POUR FIL

Publication
EP 3098336 A1 20161130 (EN)

Application
EP 16171018 A 20160524

Priority
JP 2015105343 A 20150525

Abstract (en)
The acceleration by a roller of an accompanied flow running from an yarn inlet to a yarn outlet of a thermal insulation box along the running direction of a yarn is restrained, and heat energy loss due to the discharge of hot air through the yarn outlet is restrained as much as possible. A heating-drawing unit 7 includes a thermal insulation box 16 having a yarn inlet 16a and a yarn outlet 16b and five godet rollers 11a to 11e which are yarn heating rollers. A yarn Y introduced into the thermal insulation box 16 through the yarn inlet 16a is wound onto each of the five godet rollers 11a to 11e at a winding angle of less than 270 degrees. For each of the five godet rollers 11a to 11e, a flow blocking plate 30 is provided to extend from the outside of the roller 11 toward a yarn separation position P1 on the outer circumference of the roller 11.

IPC 8 full level
D01D 10/02 (2006.01); **D01D 5/16** (2006.01); **D02J 1/22** (2006.01); **D02J 13/00** (2006.01)

CPC (source: CN EP)
D01D 5/16 (2013.01 - EP); **D01D 10/02** (2013.01 - CN EP); **D02J 1/228** (2013.01 - EP); **D02J 13/005** (2013.01 - EP)

Citation (applicant)
JP 2014173212 A 20140922 - TMT MACHINERY INC

Citation (search report)
• [XY] JP 2002371429 A 20021226 - TEIJIN LTD
• [Y] JP 2014173212 A 20140922 - TMT MACHINERY INC
• [A] JP S6321915 A 19880129 - ASAHI CHEMICAL IND

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 3098336 A1 20161130; **EP 3098336 B1 20190918**; CN 106192036 A 20161207; CN 106192036 B 20200825; CN 112030252 A 20201204; CN 112030252 B 20221220; JP 2016216882 A 20161222; JP 6668163 B2 20200318

DOCDB simple family (application)
EP 16171018 A 20160524; CN 201610346539 A 20160524; CN 202010928183 A 20160524; JP 2016096990 A 20160513