

Title (en)  
SPUN YARN DRAWING APPARATUS

Title (de)  
SPINNGARNEINZUGSVORRICHTUNG

Title (fr)  
APPAREIL D'ÉTIRAGE DE FIL FILÉ

Publication  
**EP 3064621 A1 20160907 (EN)**

Application  
**EP 16158439 A 20160303**

Priority  
JP 2015044251 A 20150306

Abstract (en)  
The accuracy in temperature control of a preheating roller heating yarns before draws is improved. A preheating roller 33 for heating yarns Y before drawn, conditioning rollers 34 and 35 which are higher in temperature and rotation speed than the preheating roller 33, the yarns Y being drawn between the conditioning rollers 34 and 35 and the preheating roller 33, a thermal insulation box 20 housing the preheating roller 33 and the conditioning rollers 34 and 35, and heat shielding members 42 to 44 provided around the preheating roller 33 are provided. A heat insulation part 48, 49 is provided at least at a region of the inner surface of the thermal insulation box 20 which region faces an installation space 46 which is defined by heat shielding members 42 to 44 and in which the preheating roller 33 is provided.

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

CPC (source: CN EP)  
**D01D 5/16** (2013.01 - CN EP); **D01D 10/02** (2013.01 - CN EP); **D01D 13/00** (2013.01 - EP); **D02J 1/22** (2013.01 - EP);  
**D02J 13/005** (2013.01 - EP)

Citation (applicant)  
JP 2014101610 A 20140605 - TMT MACHINERY INC

Citation (search report)  
• [X] EP 2679708 A1 20140101 - TMT MACHINERY INC [JP]  
• [X] JP 2014101610 A 20140605 - TMT MACHINERY INC  
• [A] JP 2014173212 A 20140922 - TMT MACHINERY INC

Cited by  
EP3929337A1; EP3517664A1; EP3517665A1; EP3403960A1; CN108866659A

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 3064621 A1 20160907; EP 3064621 B1 20190529**; CN 105937062 A 20160914; CN 105937062 B 20200609; CN 110607567 A 20191224;  
CN 110607567 B 20220218; EP 3517657 A1 20190731; EP 3517657 B1 20201028; JP 2016164314 A 20160908; JP 6532707 B2 20190619

DOCDB simple family (application)  
**EP 16158439 A 20160303**; CN 201610119813 A 20160303; CN 201911021795 A 20160303; EP 19161589 A 20160303;  
JP 2015044251 A 20150306