

Title (en)  
DRAFTING DEVICE FOR SPINNING FRAME

Title (de)  
STRECKVORRICHTUNG FÜR SPINNRAHMEN

Title (fr)  
DISPOSITIF D#ETIRAGE POUR UN METIER A FILER

Publication  
**EP 3124658 A1 20170201 (EN)**

Application  
**EP 16179877 A 20160718**

Priority  
JP 2015149848 A 20150729

Abstract (en)  
A drafting device includes a pressing portion that increases the contact pressure between a back bottom apron and a back top apron without changing the contact pressure between a middle bottom apron and a middle top apron. This does not hinder feeding of fibers of a first roving that are held by a front bottom roller and a front top roller. Additionally, separation of fibers from a second roving and breaking of the second roving may be limited between the holding position of the front bottom roller and the front top roller and the holding position of the back bottom roller and the back top roller.

IPC 8 full level  
**D01H 5/36** (2006.01); **D01H 5/88** (2006.01); **D02G 3/34** (2006.01)

CPC (source: CN EP)  
**D01H 5/26** (2013.01 - CN EP); **D01H 5/36** (2013.01 - CN EP); **D01H 5/88** (2013.01 - EP); **D02G 3/34** (2013.01 - EP)

Citation (applicant)  
WO 2015033811 A1 20150312 - TOYOTA JIDOSHOKKI KK [JP]

Citation (search report)  
• [XA] JP S4843976 B1 19731221  
• [YD] WO 2015033811 A1 20150312 - TOYOTA JIDOSHOKKI KK [JP]  
• [Y] US 2239863 A 19410429  
• [Y] DE 19547462 A1 19970626 - ZINSER TEXTILMASCHINEN GMBH [DE]  
• [A] DE 19626031 A1 19971002 - ZINSER TEXTILMASCHINEN GMBH [DE]

Cited by  
EP3461938A1; CN108728950A; EP4382647A1; LU503151B1; WO2019016414A1

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 3124658 A1 20170201**; **EP 3124658 B1 20190306**; CN 106400217 A 20170215; CN 106400217 B 20201016; ES 2718243 T3 20190628; JP 2017031512 A 20170209; JP 6358187 B2 20180718; TR 201906637 T4 20190521

DOCDB simple family (application)  
**EP 16179877 A 20160718**; CN 201610592045 A 20160725; ES 16179877 T 20160718; JP 2015149848 A 20150729; TR 201906637 T 20160718