

Title (en)

SPUN YARN TAKE-UP MACHINE AND YARN THREADING ASSISTING TOOL FOR SPUN YARN TAKE-UP MACHINE

Title (de)

SPINNGARNAUFNAHMEMASCHINE UND GARNEINFÄDELHILFSWERKZEUG FÜR EINE SPINNGARNAUFNAHMEMASCHINE

Title (fr)

MACHINE DE BOBINAGE DE FIL ET OUTIL D'ASSISTANCE D'ENFILAGE DE FIL POUR MACHINE DE BOBINAGE DE FIL

Publication

**EP 3604187 A1 20200205 (EN)**

Application

**EP 19183595 A 20190701**

Priority

JP 2018146023 A 20180802

Abstract (en)

A spun yarn take-up machine and a yarn threading assisting tool for the spun yarn take-up machine, which prevent an operator from receiving an electric shock when performing yarn threading, are provided. The spun yarn take-up machine includes a conductive frame 92, a ground wire 70, a magnet 71 which conductively attaches the ground wire 70 to the frame 92, and a hook member 72 which conductively attaches the ground wire 70 to a yarn threading assisting tool 60.

IPC 8 full level

**B65H 54/70** (2006.01); **B65H 57/00** (2006.01); **B65H 57/16** (2006.01)

CPC (source: CN EP)

**B65H 54/70** (2013.01 - EP); **B65H 57/003** (2013.01 - EP); **B65H 57/16** (2013.01 - EP); **D01D 7/00** (2013.01 - CN); **D01D 10/0436** (2013.01 - CN); **H05F 3/02** (2013.01 - CN); **B65H 2701/31** (2013.01 - EP)

Citation (applicant)

- JP 2015165060 A 20150917 - TMT MACHINERY INC
- JP 2005345107 A 20051215 - NIPPON ACP KK

Citation (search report)

- [XAYI] DE 102011016786 A1 20121018 - OERLIKON TEXTILE GMBH & CO KG [DE]
- [Y] DE 102015202016 A1 20150806 - TMT MACHINERY INC [JP]

Cited by

CN113942882A

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 3604187 A1 20200205; EP 3604187 B1 20230503; CN 110791822 A 20200214; EP 4144678 A1 20230308; EP 4144678 B1 20231122; JP 2020020069 A 20200206; JP 7114395 B2 20220808**

DOCDB simple family (application)

**EP 19183595 A 20190701; CN 201910599502 A 20190702; EP 22203232 A 20190701; JP 2018146023 A 20180802**