

Title (en)
SPUN YARN TAKE-UP MACHINE

Title (de)
SPINNGARNAUFNAHMEMASCHINE

Title (fr)
MACHINE DE BOBINAGE DE FIL

Publication
EP 3604187 B1 20230503 (EN)

Application
EP 19183595 A 20190701

Priority
JP 2018146023 A 20180802

Abstract (en)
[origin: EP3604187A1] 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)

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

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