

Title (en)  
SPUN YARN TAKE-UP MACHINE

Title (de)  
AUFNAHMEMASCHINE FÜR GESPONNENES GARN

Title (fr)  
MACHINE DE BOBINAGE DE FIL

Publication  
**EP 4144678 B1 20231122 (EN)**

Application  
**EP 22203232 A 20190701**

Priority  
• JP 2018146023 A 20180802  
• EP 19183595 A 20190701

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)

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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**EP 19183595 A 20190701**; CN 201910599502 A 20190702; EP 22203232 A 20190701; JP 2018146023 A 20180802