

Title (en)

YARN THREADING ROBOT AND SPINNING AND WINDING SYSTEM

Title (de)

GARNEINFÄDELUNGSROBOTER UND SPINN- UND AUFWICKELUNGSSYSTEM

Title (fr)

ROBOT D'ENFILAGE DE FIL ET SYSTÈME DE FILAGE ET D'ENROULEMENT

Publication

EP 4361076 A1 20240501 (EN)

Application

EP 23206013 A 20231026

Priority

JP 2022171222 A 20221026

Abstract (en)

[Problem to be solved] To provide a compact yarn threading robot capable of reducing noise in the on-site environment where yarn is produced.
[Solution] A yarn threading robot 2 threads yarn Y continuously spun from the spinning device 3 to the spinning take-up device 4. The yarn threading robot 2 includes a robot main body 21, a winder 25, and a robot arm 22. The winder 25 is located on the robot main body 21 so that the yarn Y continuously spun from the spinning device 3 is wound and stored onto the winder 25. The robot arm 22 has a hand part 23 that engages with the yarn Y between the spinning device 3 and the winder 25. The robot arm 22 operates the hand part 23 to thread the yarn Y between the spinning device 3 and the winder 25 to the spinning take-up device 4. The robot arm 22 is attached to the robot main body 21. The robot arm 22 moves the hand part 23 with respect to the robot main body 21.

IPC 8 full level

B65H 54/26 (2006.01); **B65H 54/86** (2006.01)

CPC (source: CN EP)

B65H 54/26 (2013.01 - EP); **B65H 54/86** (2013.01 - EP); **D01D 7/00** (2013.01 - CN); **B65H 2701/3132** (2013.01 - EP)

Citation (applicant)

JP 2021123814 A 20210830 - TMT MACHINERY INC

Citation (search report)

- [XA] JP S6015361 A 19850126 - TORAY INDUSTRIES
- [A] EP 3162923 A1 20170503 - TMT MACHINERY INC [JP]
- [A] EP 3725720 A1 20201021 - TMT MACHINERY INC [JP]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 23206013 A 20231026; CN 202311248753 A 20230926; JP 2022171222 A 20221026