

Title (en)
YARN PROCESSING SYSTEM AND WORK ROBOT

Title (de)
GARNVERARBEITUNGSSYSTEM UND ARBEITSROBOTER

Title (fr)
SYSTÈME DE TRAITEMENT DE FIL ET ROBOT DE TRAVAIL

Publication
EP 4361074 A1 20240501 (EN)

Application
EP 23205534 A 20231024

Priority
JP 2022170223 A 20221024

Abstract (en)
[Problem to be solved] To ensure stable and smooth unwinding of yarn from the yarn supply package.[Solution] A drawing and false twisting machine 1 includes a peg 12 on which a yarn supply package 5 wound with yarn 3, which is POY, can be set; a processing position 35 where the yarn 3 from the yarn supply package 5 set on the peg 12 is processed to form a wind package; and a yarn guide that guides the yarn 3 toward the processing position 35 at a downstream end of a balloon formed by the yarn 3 unwound from the yarn supply package 5 set on the peg 12. The yarn supply cart 50 is a work robot that performs work for the drawing and false twisting machine 1. The yarn supply cart 50 includes a yarn supply package position adjustment device 57 that moves at least one of the yarn supply package 5 from which the yarn 3 is being unwound and the yarn guide 13 to decrease the distance between the yarn supply package 5 and the yarn guide 13 as the unwinding of the yarn 3 from the yarn supply package 5 progresses.

IPC 8 full level
B65H 49/16 (2006.01); **B65H 54/26** (2006.01); **B65H 57/22** (2006.01)

CPC (source: EP)
B65H 49/16 (2013.01); **B65H 54/26** (2013.01); **B65H 57/22** (2013.01); **B65H 2701/31** (2013.01)

Citation (applicant)
• JP H0532377 A 19930209 - MURATA MACHINERY LTD
• JP 5873105 B2 20160301

Citation (search report)
• [A] DE 3429153 A1 19850228 - BARMAG BARMER MASCHF [DE]
• [A] DE 4115059 A1 19911121 - BENNINGER AG MASCHF [CH]
• [A] WO 2018146582 A1 20180816 - B TSR INT SPA [IT]

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)
EP 4361074 A1 20240501; CN 117926480 A 20240426; JP 2024062416 A 20240509

DOCDB simple family (application)
EP 23205534 A 20231024; CN 202311353716 A 20231019; JP 2023182426 A 20231024