

Title (en)
YARN MANAGEMENT SYSTEM

Title (de)
GARNVERWALTUNGSSYSTEM

Title (fr)
SYSTÈME DE GESTION DE FILS

Publication
EP 3951038 A1 20220209 (EN)

Application
EP 21187111 A 20210722

Priority
JP 2020132744 A 20200805

Abstract (en)
The disclosure includes a yarn remaining amount detector 10 that detects a yarn remaining amount as a remaining amount of a knitting yarn Y of a yarn cone 141 disposed in a flat knitting machine 100, a storage 20 that stores knitting data of a knitted fabric K, a controller 50 that manages the knitting yarn Y to be fed to the flat knitting machine 100, and at least one of a yarn conveyor 30 that conveys the yarn cone 141 to the flat knitting machine 100 or a yarn exchanger 40 that exchanges the yarn cone 141 disposed in the flat knitting machine 100 with a new yarn cone 141, in which upon determination of presence of the yarn cone 141 satisfying a management condition calculated based on the yarn remaining amount and the knitting data, the controller 50 manages the knitting yarn Y of the yarn cone 141 by the at least one of the yarn conveyor 30 or the yarn exchanger 40.

IPC 8 full level
D04B 35/12 (2006.01); **D04B 37/02** (2006.01)

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B65H 63/082 (2013.01 - CN); **B65H 63/086** (2013.01 - KR); **B65H 67/02** (2013.01 - CN KR); **B65H 67/06** (2013.01 - CN);
D04B 35/12 (2013.01 - EP); **D04B 37/02** (2013.01 - EP); **B65H 27/01/31** (2013.01 - CN KR)

Citation (applicant)
JP H08277069 A 19961022 - FUKUDA TSUTOMU, et al

Citation (search report)
• [XA] JP 5984331 B2 20160906
• [A] EP 1148162 B1 20040107 - SHIMA SEIKI MFG [JP]
• [A] CN 111074418 A 20200428 - WALT TECH GROUP CO LTD
• [A] KR 102058929 B1 20200211 - KOWONKNIT CO LTD [KR]
• [A] GB 1304170 A 19730124
• [A] WO 2019107007 A1 20190606 - SPIBER 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 MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3951038 A1 20220209; **EP 3951038 B1 20231018**; CN 114057031 A 20220218; CN 114057031 B 20230707; JP 2022029477 A 20220218;
JP 7460477 B2 20240402; KR 102573658 B1 20230831; KR 20220017846 A 20220214

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