Title (en)

YARN JOINING SYSTEM FOR SYNTHETIC YARN

Title (de)

GARNVERBINDUNGSSYSTEM FÜR SYNTHETISCHES GARN

Title (fr)

SYSTÈME D'ASSEMBLAGE DE FIL SYNTHÉTIQUE

Publication

EP 3771674 B1 20220907 (EN)

Application

EP 20188119 A 20200728

Priority

JP 2019140214 A 20190730

Abstract (en)

[origin: EP3771674A1] A package exchanging device (7) includes: a splicer (66) which forms a continuous yarn (Y0) by entangling a yarn end (Y1) and a yarn end (Y2); first hooks (67a) and (68a) which are provided so that a movable amount from an initial state increases in response to a tension acting on the continuous yarn (Y0) when the tension becomes larger than a predetermined value; a catching and guiding mechanism (61) which catches the continuous yarn (Y0) to be locked to the first hooks (67a) and (68a) and moves the caught portion to a predetermined inspection position (P61) so that a tension is generated in the continuous yarn (Y0); a potentiometer (164) which acquires the movable amount of the first hooks (67a) and (68a); and a determination unit (90b) which determines whether a yarn joining operation is successful on the basis of the movable amount acquired by the potentiometer (164) when the catching and guiding mechanism (61) is moved to the inspection position (P61).

IPC 8 full level

B65H 49/12 (2006.01); **B65H 63/00** (2006.01); **B65H 69/06** (2006.01)

CPC (source: CN EP)

B65H 49/12 (2013.01 - EP); **B65H 63/00** (2013.01 - EP); **B65H 67/085** (2013.01 - CN); **B65H 69/061** (2013.01 - EP); B65H 2701/31 (2013.01 - CN); B65H 2701/313 (2013.01 - EP); B65H 2701/319 (2013.01 - EP)

Cited by

EP4079670A1; CN114715725A; EP4296207A1; LU502347B1

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 3771674 A1 20210203; **EP 3771674 B1 20220907**; CN 112299146 A 20210202; CN 112299146 B 20240531; JP 2021024743 A 20210222; JP 7425696 B2 20240131; TW 202104696 A 20210201; TW I810473 B 20230801

DOCDB simple family (application)

EP 20188119 A 20200728; CN 202010742415 A 20200729; JP 2020127448 A 20200728; TW 109125686 A 20200729