

## Title (en)

Exchange system for a yarn-positioning device in winding machines.

## Title (de)

Wechselsystem für eine Fadenpositionierung bei Spulern.

## Title (fr)

Système d'échange pour un dispositif de mise en place d'un fil dans une machine à bobiner.

## Publication

**EP 0367253 A1 19900509 (DE)**

## Application

**EP 89120244 A 19891102**

## Priority

- CH 137089 A 19890411
- CH 410488 A 19881104

## Abstract (en)

[origin: JPH02178183A] PURPOSE: To switch a yarn of a full bobbin to a catch slit of an empty bobbin without moving a bobbin shaft, by moving the yarn in the bobbin axial direction by a first guide means and axially moving the yarn along a bent track by a second guide means by the action of a pulling means. CONSTITUTION: A full bobbin 13 and an empty bobbin 11 are turned at 180 deg., and a yarn 17 is brought into contact with the empty bobbin 11 and held by a guide plate 15. Simultaneously, a deflection plate 21 is pressed forward, and the yarn 17 is deflected between the empty bobbin 11 and the full bobbin 13 by the front edge 25 and caught by a yarn carrier 31. Next, the guide plate 15 is moved in the D direction, the yarn carrier 31 is retreated, and the yarn 17 is moved to a cutout 27 over a curved line 29 of the front edge 27 of the deflection plate 21 by the movement of the guide plate 15. Accordingly, the yarn 17 is held in the position of a ridge 55 of the full bobbin 13 during the operation. When the yarn 17 is moved into the plane surface of a catch slit 19 of the empty bobbin by the movement of the guide plate 15, the carrier 31 is returned, and the yarn 17 is caught in the slit 19 and wound on the empty bobbin.

## Abstract (de)

Die Vorrichtung zum Einführen des Fadens (17) in den Fangschlitz (19) einer leeren Spulenhülse (11) während des Wechselsvorganges von der vollen zur leeren Spule auf einen Spulautomaten (1) weist ein Fadenleitblech (21) auf, welches mit Einschnitten (27) zum Auslenken des Fadens (17) aus der imaginären Ebene durch den Fadenwulst (55) versehen ist. Damit der dem Fadenwulst (55) während des Wechselsvorganges stets noch zulaufende Faden (17) innerhalb der imaginären Ebene durch den Fadenwulst (55) zugeführt wird und gleichzeitig in der Ebene (P) durch den Fadenfangschlitz (19) verlaufen kann, wird dieser durch den verschiebbaren Fadenmitnehmer (31) über die Kurve (29) des Einschnittes (27) gezogen und am Fadenmitnehmerhaken (36) umgelenkt.

## IPC 1-7

**B65H 65/00**; **B65H 67/048**

## IPC 8 full level

**B65H 67/044** (2006.01); **B65H 54/34** (2006.01); **B65H 65/00** (2006.01); **B65H 67/048** (2006.01)

## CPC (source: EP US)

**B65H 54/346** (2013.01 - EP US); **B65H 65/00** (2013.01 - EP US); **B65H 67/048** (2013.01 - EP US); **B65H 2701/31** (2013.01 - EP US)

## Citation (search report)

- [A] US 4210293 A 19800701 - FROMAGET GEORGES [FR]
- [A] GB 2015046 A 19790905 - TORAY INDUSTRIES
- [A] EP 0211748 A1 19870225 - SAINT GOBAIN VETROTEX [FR]

## Cited by

DE102005044487A1; EP0875480A1; EP0521816A1; US6629660B1; EP0847952A1; CN111392510A; WO2013010279A1; WO2012098032A1; WO0014003A1; US9365388B2

## Designated contracting state (EPC)

CH DE FR GB IT LI

## DOCDB simple family (publication)

**EP 0367253 A1 19900509**; **EP 0367253 B1 19931006**; DE 58905833 D1 19931111; JP H02178183 A 19900711; US 4969607 A 19901113

## DOCDB simple family (application)

**EP 89120244 A 19891102**; DE 58905833 T 19891102; JP 28512189 A 19891102; US 42672089 A 19891026