Title (en)

Apparatus and method for the automatic discharge and restart of a cross-winding machine.

Title (de

Vorrichtung und Verfahren für die automatische Abnahme und das Wiederstarten einer Kreuzspulmaschine.

Title (fr)

Procédé et dispositif pour le déchargement automatique et le redémarrage d'une machine de bobinage à spires croisées.

Publication

EP 0200121 A2 19861105 (EN)

Application

EP 86105410 A 19860418

Priority

IT 1248385 A 19850430

Abstract (en)

The apparatus comprises a spindle (V) on which the bobbin (RC) is formed, and which is axially shiftable from a retracted discharge position to an expanded working position, so as to cooperate with a fixed extractor (E) whereby when the spindle carrying the formed bobbin is retracted, the bobbin abuts against the extractor and is discharged. The spindle is provided on its free end with a frontally toothed portion (D). The spindle can be moved from a bobbin forming station (K) to a tie-in and discharge station (K min ), while the yarn (F) is maintained under tension. On the side surface of the formed bobbin at the tie-in and discharge station, at one end of the bobbin, there is positioned a needle (50) having a hook (150). A winding rotation is imparted to said bobbin and to said needle so that the body of the needle will be enfolded by a suitable number of turns (FX) of yarn. The yarn is then displaced to form one turn (FX min ) engaging the hook of the needle, which is then stopped together with the bobbin. The needle is retracted so that it will cause the tail end of the yarn to be bent into a U-shape and to be passed beneath the turns. Means (54) are provided for cutting the yarn and for retaining the leading end of said yarn. At this point, the bobbin is discharged by retracting the spindle and subsequently the spindle is moved again to the bobbin forming station where it is extended to its working position so that its tooted end will engage the leading end of the yarn retained by the cutting and retaining means and a new cycle of the winding machine can be resumed upon re-starting the rotary motion of the spindle.

IPC 1-7

B65H 65/00; B65H 67/04

IPC 8 full level

B65H 65/00 (2006.01); B65H 67/04 (2006.01)

CPC (source: EP)

B65H 65/005 (2013.01); B65H 67/04 (2013.01); B65H 2701/31 (2013.01)

Cited by

GB2346156B; EP0578301A1; US5425509A; EP1136413A1; GB2379671A; GB2379671B; EP1112954A1; FR2803279A1; US6484961B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 0200121 A2 19861105; EP 0200121 A3 19870930; IT 1186867 B 19871216; IT 8512483 A0 19850430

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EP 86105410 A 19860418; IT 1248385 A 19850430