

Title (en)
Method and device for rewinding of yarn packages

Title (de)
Verfahren und Vorrichtung zum Umwickeln eines gesponnenen Garnkörpers

Title (fr)
Méthode et dispositif pour l'opération de renbobinage de paquets de fil

Publication
EP 1004694 A3 20001102 (DE)

Application
EP 99119993 A 19991013

Priority
DE 19854786 A 19981127

Abstract (en)
[origin: EP1004694A2] To rewind a yarn package, formed at a pot spinner where the spun yarn is laid by centrifugal forces at the inner wall of the spinning pot (4), the winding sleeve (10) has one end to catch the yarn with a surplus length (15) between that end of the sleeve (10) and the drawing unit (1). The surplus yarn length (15) is severed, and removed by suction. The surplus yarn length is severed by cutting, when the spun yarn is held at one end by the rollers of the drawing unit (1) and the other end is held at the yarn body or the sleeve (10) under tension. The cutter is controlled through the relative movement between the sleeve and the yarn guide tube (6), where a rotation axis lies on the theoretical center line on the common longitudinal axes of the sleeve (10) and yarn guide tube (6). The suction, to remove the cut yarn, uses the suction unit to remove lint and debris from the yarn. The cut yarn (15) also be extracted by the suction system (28) at the mobile doffer (26), which also carries the cutter (27). An Independent claim is included for an appts. with at least one cutter to sever the surplus yarn length (15) from the wound yarn body (9), together with a suction system (28) to extract the severed yarn (15). Preferred Features: Each spinning station can have a cutter and suction unit to sever the surplus yarn length (15) for extraction, using the suction unit to extract the lint and debris and/or the suction unit (28) at the mobile doffer (26). The cutter has at least one moving blade, moving in the axial direction of the sleeve (10), or rotating round the axis of a center line formed by the common longitudinal axes of the sleeve (10) and the yarn guide tube (6). The blade has a crown shape. The rotary movement is through a groove at least in a partial spiral, to carry a bolt at the cutting blade. Or the cutter is carried by the mobile doffer (26), which is also fitted with a suction unit (28) to extract the cut yarn waste (15).

IPC 1-7
D01H 9/06; **D01H 9/16**

IPC 8 full level
D01H 1/08 (2006.01); **D01H 9/06** (2006.01); **D01H 9/16** (2006.01); **D01H 9/18** (2006.01)

CPC (source: EP US)
D01H 9/06 (2013.01 - EP US); **D01H 9/18** (2013.01 - EP US); **Y10S 242/911** (2013.01 - EP US)

Citation (search report)
• [A] DE 1011787 B 19570704 - PRINCE SMITH & STELLS LTD
• [A] DE 19650598 A1 19980610 - SCHLAFHORST & CO W [DE]
• [A] DE 19523937 A1 19970102 - SCHLAFHORST & CO W [DE]
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 005 (C - 467) 8 January 1988 (1988-01-08)

Cited by
EP3527700A1; CN110129927A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 1004694 A2 20000531; **EP 1004694 A3 20001102**; **EP 1004694 B1 20030820**; AT E247729 T1 20030915; CN 1255559 A 20000607; DE 19854786 A1 20000531; DE 59906663 D1 20030925; ES 2201613 T3 20040316; JP 2000160439 A 20000613; RU 2222651 C2 20040127; TR 199902893 A2 20000621; TR 199902893 A3 20000621; US 6244029 B1 20010612

DOCDB simple family (application)
EP 99119993 A 19991013; AT 99119993 T 19991013; CN 99125841 A 19991126; DE 19854786 A 19981127; DE 59906663 T 19991013; ES 99119993 T 19991013; JP 33328699 A 19991124; RU 99124808 A 19991126; TR 9902893 A 19991125; US 44918899 A 19991124