

Title (en)
WINDING DEVICE

Title (de)
AUFSPULVORRICHTUNG

Title (fr)
DISPOSITIF D'EMBOBINAGE

Publication
EP 0677019 B1 19960522 (DE)

Application
EP 94903769 A 19931214

Priority
• DE 4243671 A 19921223
• DE 4308989 A 19930320
• EP 9303527 W 19931214

Abstract (en)
[origin: WO9414694A1] A winding machine for winding a continuously supplied thread into a cross-wound bobbin has a cross-winding device which conveys the thread back and forth along a predetermined section which lies across the running direction of the thread. The winding machine has the following characteristics: the thread guide is centrally fixed above the cross-winding stroke and defines a tangential plane to a rotary cylinder that follows the cross-winding device. Driving arms (5, 6, 7, 8) are secured to two rotors (1, 2) that rotate in opposite directions. The axes of the rotors are arranged in a common plane (12). The wings move in two closely adjacent, parallel planes which perpendicularly intersect the planes (12) of the rotor axes. On one side of the thread running plane (10), a first template (9) is arranged in a plane which is closely adjacent and parallel to one of the planes of the wings and projects into the cross-winding plane, deflecting the head thread guide (13) in such a way that the thread is conveyed back and forth in the cross-winding direction at a substantially constant cross-winding speed or at a cross-winding speed predetermined according to a determined law of motion. Auxiliary templates (11) in the area of the ends of the cross-winding stroke lie in a plane parallel to the plane of the wings and are arranged on the side of the cross-winding plane (10) opposite to the main template (9). The planes (12) of the rotor axes and the main template (9) are arranged with respect to the cross-winding plane (10) in such a way that the main template does not project into the cross-winding plane in the area of the ends of the stroke, whereas the auxiliary templates (11) project into the cross-winding plane in the areas of the ends of the stroke, taking over the functions of guiding the thread and determining the cross-winding speed.

IPC 1-7
B65H 54/28

IPC 8 full level
B65H 54/28 (2006.01); **B65H 59/00** (2006.01)

CPC (source: EP KR US)
B65H 54/28 (2013.01 - KR); **B65H 54/2839** (2013.01 - EP US); **B65H 59/005** (2013.01 - EP US); **B65H 2701/31** (2013.01 - EP US)

Cited by
WO2015007339A1; US6024320A

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 9414694 A1 19940707; CN 1031933 C 19960605; CN 1089569 A 19940720; DE 59302712 D1 19960627; EP 0677019 A1 19951018; EP 0677019 B1 19960522; JP H08504728 A 19960521; KR 100197180 B1 19990615; KR 960700190 A 19960119; TW 295102 U 19970101; US 5624081 A 19970429

DOCDB simple family (application)
EP 9303527 W 19931214; CN 93112929 A 19931220; DE 59302712 T 19931214; EP 94903769 A 19931214; JP 51475794 A 19931214; KR 19950702617 A 19950623; TW 85202360 U 19931130; US 49188095 A 19950801