

Title (en)  
Yarn winder

Title (de)  
Garnaufwickelvorrichtung

Title (fr)  
Bobinoir pour fil textile

Publication  
**EP 1300357 A1 20030409 (EN)**

Application  
**EP 02021475 A 20020925**

Priority  
JP 2001306027 A 20011002

Abstract (en)  
The present invention relates to a yarn winder that uses tension detecting method to obtain accurate tension value regardless of winding diameter of a yarn package in a yarn winder. The yarn winder includes a bobbin holder H that is set with at least a bobbin B for winding at least a yarn S, a contact roller C that rotates while contacting against at least a yarn package P, a traverse device T that is provided to an upstream side of the contact roller C and traverses the yarn S the is fed, a traverse fulcrum guide 1 that is to be a traverse fulcrum of the yarn that S is traversed in the upstream side of the traverse device, and a tension detector 3 that is located between the traverse device T and the traverse fulcrum guide 1 and that detects tension of the yarn S by contacting the yarn S against a contact element 4 at both ends of an amplitude of the traverse. In such a yarn winder, each of distances during the winding process, between the traverse fulcrum guide and the tension detector, between the tension detector and the traverse device, and between the traverse fulcrum guide and the traverse device, is maintained constant regardless of winding diameter of the yarn package (Fig. 1). <IMAGE>

IPC 1-7  
**B65H 59/40**

IPC 8 full level  
**D02J 1/22** (2006.01); **B65H 59/10** (2006.01); **B65H 59/40** (2006.01)

CPC (source: EP)  
**B65H 59/40** (2013.01); **B65H 2553/21** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)  
• [DY] JP S4848171 A 19730707  
• [A] US 3931938 A 19760113 - HASEGAWA KATSUMI, et al  
• [A] US 4394986 A 19830726 - HASEGAWA KATSUMI [JP], et al  
• [A] DE 19938491 A1 20010215 - SCHLAFHORST & CO W [DE]  
• [A] US 5074481 A 19911224 - KATHKE GREGOR [DE]  
• [A] US 5029762 A 19910709 - BEHRENS REINHARD [DE], et al  
• [A] US 4245794 A 19810120 - HASEGAWA KATSUMI, et al  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 04 30 April 1997 (1997-04-30)  
• [DA] PATENT ABSTRACTS OF JAPAN vol. 008, no. 204 (P - 301) 18 September 1984 (1984-09-18)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 01 29 January 1999 (1999-01-29)

Designated contracting state (EPC)  
CH DE LI

DOCDB simple family (publication)  
**EP 1300357 A1 20030409; EP 1300357 B1 20060315**; CN 1270955 C 20060823; CN 1408630 A 20030409; DE 60209843 D1 20060511; DE 60209843 T2 20061130; JP 2003113544 A 20030418; JP 3724402 B2 20051207

DOCDB simple family (application)  
**EP 02021475 A 20020925**; CN 02143970 A 20020929; DE 60209843 T 20020925; JP 2001306027 A 20011002