

Title (en)  
Individual-spindle-drive type multi-twister

Title (de)  
Mehrfach-Zwirnmaschine mit Einzelspindeltrieb

Title (fr)  
Machine de torsion multiple avec broche à entraînement individuel

Publication  
**EP 0952245 A1 19991027 (EN)**

Application  
**EP 99103544 A 19990224**

Priority  
• JP 8092898 A 19980327  
• JP 10601998 A 19980416

Abstract (en)  
To provide an inexpensive individual-spindle-drive type multi-twister that has a simple structure and can prevent malfunctions when used with fiber dust. The present invention relates to an individual-spindle-drive type multi-twister 1 that has a spindle drive motor 6 for every spindle 2 for twisting yarn and creates a winding package P from a yarn supply package 8 which is provided for each spindle 2. Each spindle drive motor 6 is driven by means of a rotation speed control apparatus 44. The twister 1 is characterized in that it comprises a yarn-run judgment means 44b to determine whether yarn is running from the state of each spindle drive motor 6, and a yarn length measuring means 44a for performing yarn length measurement using the yarn running signal of the yarn-run judgment means 44b. <IMAGE>

IPC 1-7  
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IPC 8 full level  
**B65H 54/20** (2006.01); **B65H 63/08** (2006.01); **D01H 13/16** (2006.01); **D01H 13/24** (2006.01)

CPC (source: EP KR)  
**B65H 54/20** (2013.01 - EP); **B65H 63/08** (2013.01 - EP); **D01H 1/10** (2013.01 - KR); **D01H 1/14** (2013.01 - KR); **D01H 13/1616** (2013.01 - KR); **D01H 13/1633** (2013.01 - EP); **D01H 13/24** (2013.01 - EP); **D01H 13/32** (2013.01 - KR); **B65H 2701/31** (2013.01 - EP)

Citation (search report)  
• [A] DE 2519221 A1 19761118 - ZINSER TEXTILMASCHINEN GMBH  
• [A] GB 2010344 A 19790627 - TELDIX GMBH  
• [A] FR 2375359 A1 19780721 - TELDIX GMBH [DE]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 013, no. 553 (C - 663) 8 December 1989 (1989-12-08)

Cited by  
EP3995612A1; FR2867173A1; CN111676576A; WO2005092756A1

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