

Title (en)  
System to control the quality of yarn and relative device

Title (de)  
System zur Regelung der Garnqualität und zugehörige Vorrichtung

Title (fr)  
Système et dispositif de commande de la qualité de fil textile

Publication  
**EP 0616058 B1 19970730 (EN)**

Application  
**EP 94101790 A 19940207**

Priority  
IT UD930044 A 19930317

Abstract (en)  
[origin: EP0616058A1] System to control the quality of yarn in association with spinning machines or twisting frames, in which the yarn (12) cooperates with a yarn-guide loop (11) fitted solidly to an arm (14) which bears the yarn-guide loop (11) and which is secured to the structure of the machine, the system including at least one piezoelectric sensor (13) solidly fitted to the arm (14) bearing the yarn-guide loop (11), the piezoelectric sensor (13) being associated with a data processing and control means (17), which processes the signal generated by the piezoelectric sensor (13) and generates an electrical signal (16) of a sinusoidal type having an amplitude proportional to the tension of the yarn (12) and a frequency proportional to the speed of rotation of the balloon. Device to control the quality of yarn, which is suitable to be integrated in the system of the claims hereinbefore and comprises an arm (14) secured to the structure of the machine and bearing a yarn-guide loop (11) solidly fixed to the arm (14), the arm (14) being solidly associated lengthwise with a piezoelectric sensor (13). <IMAGE>

IPC 1-7  
**D01H 13/16**; **B65H 63/032**

IPC 8 full level  
**B65H 63/032** (2006.01); **D01H 13/16** (2006.01)

CPC (source: EP)  
**B65H 63/0327** (2013.01); **D01H 13/1633** (2013.01); **B65H 2513/11** (2013.01); **B65H 2701/31** (2013.01)

Cited by  
EP4261331A1; IT202200006281A1; EP1707523A1; US6099963A; ES2154549A1; EP0990721A1; US5718854A; WO2006103001A1; US6796337B2; US6413452B1

Designated contracting state (EPC)  
AT CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0616058 A1 19940921**; **EP 0616058 B1 19970730**; AT E156203 T1 19970815; DE 69404513 D1 19970904; DE 69404513 T2 19980219; ES 2107062 T3 19971116; IT 1262088 B 19960619; IT UD930044 A0 19930317; IT UD930044 A1 19940917

DOCDB simple family (application)  
**EP 94101790 A 19940207**; AT 94101790 T 19940207; DE 69404513 T 19940207; ES 94101790 T 19940207; IT UD930044 A 19930317