

Title (en)  
Yarn tension sensor for yarn-feeding devices

Title (de)  
Garnspannungssensor für Garnzuführgeräte

Title (fr)  
Capteur de tension de fil pour dispositifs d'alimentation en fil

Publication  
**EP 2067728 A1 20090610 (EN)**

Application  
**EP 07425767 A 20071203**

Priority  
EP 07425767 A 20071203

Abstract (en)  
The tension sensor (28) is installable on a yarn feeder (10, 24) for measuring the tension of the delivered yarn, and comprises a support (30), a plate (46) of a ceramic material having a mounting portion (48) anchored to the support (30), and a flexible projection (50) extending from the mounting portion (48) for deviating the unwinding yarn with one of its ends (51) slidably engaged by the yarn. Circuit means (R1, R2, R3, R4, RP1, RP2, RS1, RS2) incorporated in the plate (46) generate variable electric signals as a function of the position of the flexible projection (50). A base of a ceramic material (56) is bonded to the mounting portion (48) by vitrification and is screwed to the support (30).

IPC 8 full level  
**B65H 59/40** (2006.01)

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

Citation (applicant)  
• EP 0707102 A2 19960417 - LGL ELECTRONICS SPA [IT]  
• US 4752044 A 19880621 - MEMMINGER GUSTAV [DE], et al  
• US 4953367 A 19900904 - MEMMINGER GUSTAV [DE], et al  
• WO 9959909 A1 19991125 - ELTEX SWEDEN AB [SE], et al

Citation (search report)  
• [DA] WO 9959909 A1 19991125 - ELTEX SWEDEN AB [SE], et al  
• [A] US 2457616 A 19481228 - DYKE WILLIAM D VAN, et al  
• [A] EP 0534226 A1 19930331 - TOKYO ELECTRIC CO LTD [JP]  
• [A] EP 0475001 A2 19920318 - ATOCHEM NORTH AMERICA [US]  
• [A] WO 2004039714 A1 20040513 - MEMMINGER IRO GMBH [DE], et al

Cited by  
CN114506738A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 2067728 A1 20090610**; DE 602008001545 D1 20100729; EP 2067729 A1 20090610; EP 2067729 B1 20100616

DOCDB simple family (application)  
**EP 07425767 A 20071203**; DE 602008001545 T 20080628; EP 08011753 A 20080628