

Title (en)
Lower thread tension control device

Title (de)
Steuerungsvorrichtung für eine geringere Fadenspannung

Title (fr)
Dispositif de contrôle de tension de fil inférieur

Publication
EP 2196572 A1 20100616 (EN)

Application
EP 09176975 A 20091125

Priority
JP 2008299413 A 20081125

Abstract (en)
A lower thread tension control device (1) includes a thread tensioning spring means (20) and an electromagnet (26). The thread tensioning spring means (20) includes a support member (17) having an L-shaped section and is made of a magnetic material, an adjust screw (19) which is screwed to the support member (17) through an intermediate portion (14c) of the thread tensioning spring (14), and a support shaft (18) which having both ends attached to the bobbin case (11) to rotatably support the support member (17). A pressing force of the thread pressing portion (14a) of the thread tensioning spring (14) against the lower thread is controlled in accordance with a change in a current to be supplied to the electromagnet (26), and by adjusting an initial tension of the lower thread in accordance with a screwing amount of the adjust screw (19).

IPC 8 full level
D05B 57/26 (2006.01)

CPC (source: EP)
D05B 57/26 (2013.01)

Citation (applicant)
JP 2008023047 A 20080207 - JUKI KK, et al

Citation (search report)

- [XP] JP 2009261551 A 20091112 - JUKI KK
- [XP] JP 2009261550 A 20091112 - JUKI KK
- [A] JP H0568764 A 19930323 - JUKI KK
- [A] JP S61228895 A 19861013 - HIROSE MFG CO LTD
- [AD] JP 2008023047 A 20080207 - JUKI KK, et al
- [A] US 4530296 A 19850723 - TAKENOYA HIDEAKI [JP], et al

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CN115262112A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2196572 A1 20100616; EP 2196572 B1 20110824; AT E521745 T1 20110915; CN 101736537 A 20100616; CN 101736537 B 20130529;
JP 2010124863 A 20100610; JP 5253980 B2 20130731

DOCDB simple family (application)
EP 09176975 A 20091125; AT 09176975 T 20091125; CN 200910178386 A 20091125; JP 2008299413 A 20081125