

Title (en)

Controlled-tension yarn-feeding apparatus for textile machines, with yarn recovering function

Title (de)

Garnzuführungsvorrichtungen mit geregelter Spannung für Textilmaschinen, mit Garnrückgewinnungsfunktion

Title (fr)

Appareil d'alimentation en fil à tension contrôlée pour machines textiles, avec une fonction de récupération de fils

Publication

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Application

EP 12007753 A 20121116

Priority

IT TO20120156 A 20120222

Abstract (en)

[origin: EP2631339A1] A weft feeder (11) has a stationary drum (12) having a yarn (F) wound thereon which is drawn by a textile machine (17). A stabilizing brake (18) maintains the yarn under tension. Controlled braking means (20) placed downstream of the stabilizing brake (18) apply a modulated braking action to the yarn. A control unit (CU) generates braking signals (BI) as a function of measured tension signals (T_meas) received from a tension sensor (38). The controlled braking means comprise a motorized reel (22) having an inlet port (30a) communicating with an opening (29) defined on an end surface (22a) of the reel, and an outlet port (30b) defined on the lateral winding surface (22b) of the reel, a passage (28) for the yarn (F) extending between the ports. The reel (22) is driven to adjust its angular position about its axis (A) based on the braking signals (BI), whereby a braking action by friction is applied to the yarn, which is determined by the friction of the yarn against the contact surfaces of the reel (22), and which increases in intensity with increasing angle of rotation (θ) of the reel (22) with respect to an angular position of minimum braking.

IPC 8 full level

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CPC (source: EP)

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