

Title (en)

Embroidering frame with a web stretching device

Title (de)

Stickmaschinengatter mit Seitenspannleisten

Title (fr)

Chassis de machine à broder à dispositif de mise sous tension du tissu

Publication

**EP 0919657 A1 19990602 (DE)**

Application

**EP 97810798 A 19971027**

Priority

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Abstract (en)

The embroidery fabric on an embroidery machine, which moves the fabric in relation to the tensioning device, has at least part of the fabric (21) held under tension by a side tensioning bar (35) so that the fabric has the same tension after the shifting movement as before the movement. During fabric movement, it is detached from the tension bar by an appropriate length for the movement. When the fabric (21) has been moved into a new position, the material is secured to the pins at the side tensioning bar (35) while the running of the threads is taken into account. The fabric is secured, during creel movement, so that it is still in relation to the needles. An Independent claim is included for an embroidery machine creel, where the tensioning bars (35) have a translatory movement in it so that, when they move, the fabric is carried with them. The side tensioning bars are divided into segments (25) which lock and release the fabric. The segments (25) are mounted to a flexible carrier chain (29), which is a closed loop between two deflection wheels (31). At the side towards the fabric, the carrier chain travels in a guide rail (33). A static unit at the creel detaches the fabric (21) from the side tensioning bars, as the fabric is moved through it. The side tensioning bars (35) have a number of pins to engage the embroidery fabric, and the fabric is detached by lifting clear of the pins. The side tensioning bar and fabric detaching unit are components of a side tensioning system (23), mounted to the creel. The fabric is automatically held under tension while its position is being shifted, using two rollers on parallel axis aligned at an angle to the movement direction of the fabric. The chain or segments ride in a guide rail to engage the segments into the fabric and hold it under tension.

Abstract (de)

An einem Stickmaschinengatter (11) mit einer unteren Welle (19), von welcher ein Stickgrund (21) abrollbar ist und einer oberen Welle (19), auf welche der Stickgrund (21) aufrollbar ist, ist eine Seitenspanneinrichtung (23) angeordnet, welche eine aus einzelnen Segmenten (25) bestehende Seitenspannleiste (35) aufweist. Die Segmente (25) sind auf einer Kette (29) befestigt und mit dieser in einer Schlaufe um zwei Umlenkräder (31) geführt, so dass bei einer Verschiebung des Stickgrundes (21) die Seitenspannleiste (35) mit dem Stickgrund (21) mittläuft. Der Stickgrund (21) wird bei einer Verschiebung am Ende der Seitenspannleiste (35) durch eine Löseeinrichtung (37) von den Segmenten (25) gelöst. Der Stickgrund wird nur soweit verschoben, dass ein Teil des Stickgrundes noch durch die Seitenspannleiste (35) gespannt bleibt. Danach wird der Stickgrund (21) entsprechend dem Fadenlauf wieder mit einer kontinuierlichen Spannung in die Seitenspannleiste (35) eingehängt. <IMAGE> <IMAGE>

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IPC 8 full level

**D05C 9/12** (2006.01)

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Citation (search report)

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