

Title (en)

Process and device to make quilted articles.

Title (de)

Verfahren und Einrichtung zum automatischen Nähen von Steppmustern auf Stoffbahnen, insbesondere Inlets von Steppbetten.

Title (fr)

Machine et procédé pour fabriquer des articles ouatinés.

Publication

EP 0220368 A2 19870506 (DE)

Application

EP 86106945 A 19860522

Priority

DE 3534988 A 19851001

Abstract (en)

1. Method for the automatic sewing of quilted patterns on fabric webs, in particular ticking for quilt beds, by quilting the pattern during and with the aid of a freely programmable relative movement of an automatic sewing machine on a fabric web, whereby the sewing head thereof, performing program-controlled movements while the fabric web is temporarily held tight, quilts a field of the fabric web which is limited with respect to length and width in one operating step in each case while moving back and forth, and the fabric web is transported further in the longitudinal direction cyclically by one field in the sewing area each time after each operating step, and the fabric web is transported through or across the sewing area at least once each time both in the longitudinal direction and also if necessary in the opposite direction using mechanical means, at least two automatic sewing machines are used for quilting the pattern, which machines can be moved laterally outwards out of the sewing area, that is, out of the area covered by the fabric web, and which are guided, able to be moved independently of each other, in the longitudinal (X) and transverse directions (Y) using freely programmable drive controls, with the foot of a sewing head being guided slidingly over the fabric web without pressure during sewing, whereas it is raised from the fabric web during the further transportation thereof, during quilting while at a standstill and optionally also during an advance movement the fabric web or the edge regions thereof are stretched or flattened, preferably close to the automatic sewing machines, outwards transversely to the direction of the advance of the fabric, whereby means which have a pulling or flattening action on the edge regions are used for this purpose, the fabric web is held tight in each case directly in the region of a sewing head close to the presser feet of the sewing heads by means of flat grippers, and the fabric web or the edges thereof is pressed against the support on the left and right at a short distance in front of each sewing head using pressing means when the sewing heads are brought into the sewing area.

Abstract (de)

Steppdeckennähvorrichtung mit zwei gegenseitig angeordneten Nähmaschinen welche programmgesteuerte X und Y Bewegungen über einem Nähbereich ausführen der periodisch erneuert wird durch den Weitertransport der Stoffbahn(en) in Längsrichtung die ansonsten während des Nähvorganges stillsteht(stehen). Ziehend oder Streichend einwirkende Mittel sowie drehende Bürsten, flache Greifer, Druckfüsse o.d.gl. werden verwendet, um den Rand der Stoffbahnen im Bereich der Nähorgane dünn und glatt zu halten derart, daß das Ein- und -Austreten der Nähinstrumente über dem Nähfeld erleichtert wird. Mittel werden auch verwendet um die Ränder der Stoffbahn(en) zu erkennen und Kollision der Nähköpfe zu vermeiden.

IPC 1-7

D05B 11/00; D05B 25/00

IPC 8 full level

D05B 11/00 (2006.01); D05B 25/00 (2006.01)

CPC (source: EP)

D05B 11/00 (2013.01); D05D 2207/04 (2013.01); D05D 2209/14 (2013.01); D05D 2303/02 (2013.01)

Cited by

EP1120486A1; US6125777A; US6000352A; EP0750696A4; US5908004A; US5425319A; EP0582130A3; US11427944B2; US6408773B2; US7574788B1; US8042478B2; EP3819415A4; WO0005445A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0220368 A2 19870506; EP 0220368 A3 19870520; EP 0220368 B1 19901024; AT E57722 T1 19901115; DE 3534988 A1 19870402; DE 3534988 C2 19901108; DE 3534988 C3 19950209; DE 3675147 D1 19901129

DOCDB simple family (application)

EP 86106945 A 19860522; AT 86106945 T 19860522; DE 3534988 A 19851001; DE 3675147 T 19860522