

Title (en)

Process and thread guide for making a belt with tubular selvages.

Title (de)

Verfahren und Fadeneinleger zur Herstellung eines Gurtbandes mit Hohlkanten.

Title (fr)

Procédé et guide-fil pour la fabrication d'une courroie à lisières tubulaires.

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Application

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Priority

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Abstract (en)

[origin: ES8200151A1] The belting has a single layer woven central portion (24) and two tubular edge portions (21, 22) and is made on a needle belt weaving loom provided with a knitting needle (37). The belting serves preferably for safety belts in motor vehicles. One tubular edge portion (22) is closed by a row of stitching (28') whereby the row of stitching does not lie at the outer edge of the tubular edge portion (22) but should disappear into the fabric at the edge of the central portion (24). By means of the invention the rate of production should be increased, which results from manufacture with two simultaneously moving weft thread insertion needles (30, 34) which simultaneously at each pick insert two weft threads (31, 35). To anchor one weft thread at the outer edges of the edge parts a common shed for both weft thread insertion needles is formed at least on the insertion side by the two outer edge warp threads (1a, 2a). For weaving the edge parts (21', 22') between the central portion (24) and the two outer edge warp threads (1a, 2a) an upper shed (32a) and a lower shed (32b) are formed, of which one shed accepts the first weft thread insertion needle (34) which forms the edge fabric and the other the second weft thread insertion needle (30) of which the weft thread (31) binds only with at least one of the two outer edge warp threads (1a, 2a). A loop (35', 51') is drawn by the knitting needle (37) outside the edge part (22') through a loop (31', 35") of at least one of the weft threads (31, 35) to form a stitch (28, 65). The row of stitching is formed either from one weft thread (35) or from a catch thread (51). In the latter case a thread inserter (53) serves to feed simultaneously the catch thread (51) and a barrier thread (41). The two weft threads (31, 35) are positively fed and the length fed of the one weft thread (35) is greater by at least the length of the two outer edge parts (21', 22') than the length fed of the other weft thread (31).

Abstract (de)

Das Gurtband hat einen einlagig gewebten Mittelteil (24) und zwei Hohlkanten und wird auf einer Nadelbandwebmaschine mit Wirknadel (37) hergestellt. Es dient vorzugsweise für Sicherheitsgurte in Kraftfahrzeugen. Die eine Hohlkante wird durch eine Maschenreihe (28, 65) geschlossen, wobei die Maschenreihe nicht am Außenrand der Hohlkante liegen, sondern im Gewebe verschwinden soll. Durch die Erfindung soll die Produktionsgeschwindigkeit gesteigert werden, was durch Herstellung mit zwei gleichzeitig bewegten Schußnadeln (30, 34) geschieht. Die Maschenreihe wird entweder aus dem einen Schußfaden (35) oder aus einem Fangfaden (51) gebildet. Im letzteren Falle dient ein Fadeneinleger (58) zur gleichzeitigen Zuführung des Fangfadens (51) und eines Sperrfadens (41).

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Citation (search report)

- DE 2719382 A1 19781109 - BERGER JOHANN, et al
- FR 2376910 A1 19780804 - THUASNE & CIE [FR]
- FR 2286664 A1 19760430 - BERGER OHG ELASTIC [DE]
- US 2194038 A 19400319 - WALLACE JR CLIFFORD N
- DE 2161013 A1 19730607 - MUELLER JAKOB

Cited by

US5769130A; CN113403722A; DE3345508A1; EP0147621A1; DE4009455A1; US5299603A; DE10228066A1; DE10228066B4; WO9525836A1; WO0020671A1; DE202012001690U1; WO2013053790A2; US9827944B2

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