

Title (en)

Method for manufacturing a felt sheet and felt sheet

Title (de)

Verfahren zur Herstellung eines Filzbandes sowie Filzband

Title (fr)

Procédé destiné à la fabrication d'une bande de feutre et une bande de feutre

Publication

EP 1837440 A1 20070926 (DE)

Application

EP 07005050 A 20070312

Priority

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Abstract (en)

The manufacture of paper machine felt with a carrier imbedded in a thread matrix of two woven fabric arranged over one another, comprises producing first and second carrier module for longitudinal and crosswise woven fabric respectively and needling the carrier module on a non-woven layer during the formation of thread matrix. The longitudinal woven fabric is made up of parallelly running longitudinal threads (13, 14). The crosswise woven fabric is made up of parallelly running crosswise threads, which are continuous over the breadth of the felt strip. The manufacture of paper machine felt with a carrier imbedded in a thread matrix of two woven fabric arranged over one another, comprises producing first and second carrier module for longitudinal and crosswise woven fabric respectively and needling the carrier module on a non-woven layer during the formation of thread matrix. The longitudinal woven fabric is made up of parallelly running longitudinal threads (13, 14). The crosswise woven fabric is made up of parallelly running crosswise threads, which are continuous over the breadth of the felt strip. The second carrier module completely covers the first module. The production of the first carrier module comprises manufacturing a first auxiliary carrier channel with a breadth, which is less than the breadth of the finished felt belt, joining the first carrier channel with the threads through the influence of a laser beam, and winding the first carrier channel before, during and after the deposition of the threads in the shape of a coil up to a breadth, which conforms to the breadth of the felt strip. The threads contain an additive, which makes the threads for adsorbing laser energy and is bringable by means of laser energy superficially and partially to the melting temperature. The production of the second carrier module comprises manufacturing individual carrier module sections with a stretching in a direction, which conforms to the breadth of the finished felt strip, forming a connection between the second channel and the threads through the influence of a laser beam, and arranging the carrier module sections on the first module longitudinally one after another, on top of the other and adjacent to each other. The carrier module samples consist of second auxiliary carrier channels. The non-woven and/or a network and/or a foil are used for the auxiliary carrier channels. The non-woven is produced with a grammage of 30-60 g/m². The thread is arranged on the parallel side edges (9, 10) of the auxiliary carrier channels. The first and second auxiliary carrier channels are made with a breadth of 0.2-1.5 m and 0.5-6 m. The first auxiliary carrier channel and/or the carrier module sections are bound to each other at their edges arranged on one another. The edges are stitched and/or welded and/or bonded to one another in the overlapping area, are provided with successive, complementary projections (11) and recess (12) and are meshed together with their projections and recesses. The projections of the edges are bound to one another. Before and after the meshing of the projections and the recesses, a thread is laid on the projections and the recesses. The thread is attached on the projections of both the edges of the auxiliary carrier channel. The threads that run above the edges correspond to the remainder of the edges. An independent claim is included for a paper machine felt.

Abstract (de)

Die Erfindung betrifft ein Verfahren zur Herstellung eines Filzbandes mit einem in eine Fasermatrix eingebetteten Träger (40, 43) aus wenigstens zwei übereinander angeordneten Fadengelegen (41, 42, 44, 45), von denen wenigstens eines als Längsfadengelege (41, 44), bestehend aus parallel verlaufenden Längsfäden (13, 14, 47), und wenigstens eines als Quersfadengelege (42, 45, 46), bestehend aus parallel verlaufenden Quersfäden (23, 24, 25, 48, 49); ausgebildet sind, wobei Quersfäden (23, 24, 25, 48 49) vorhanden sind, die über die Breite des Filzbandes durchgehend sind. Sie betrifft desweiteren ein Filzband, das nach dem Verfahren hergestellt ist.

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Citation (search report)

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