Title (en)

Clothing for use in machines to manufacture material webs in the form of paper, cardboard or tissue webs and method of manufacturing paper machine clothing

Title (de)

Bespannung zum Einsatz in Maschinen zur Herstellung von Materialbahnen in Form von Papier-, Karton- oder Tissuebahnen und Verfahren zur Herstellung einer Papiermaschinenbespannung

Title (fr)

Habillage destiné à l'utilisation dans des machines de fabrication de bandes de matériau en forme de bandes de papier, carton ou tissu et procédé de fabrication d'un habillage de machine à papier

Publication

**EP 2088236 A3 20120627 (DE)**

Application

**EP 08166855 A 20081017**

Priority

US 2716608 P 20080208

Abstract (en)

[origin: EP2088236A2] The paper machine clothing comprises a layer forming material web supporting surface, and particulate polymer material (5), which fuses after the thermal activation and on which, a layer forming structure is connected, so that the layer is partially impregnated and an intermediate area in the structure is partially filled. The polymer material bonded to the layer forming structure is arranged in the area of the surface supporting the material web viewed over the width direction of the clothing only in a predefined area. The paper machine clothing comprises a layer forming material web supporting surface, and particulate polymer material (5), which fuses after the thermal activation and on which, a layer forming structure is connected, so that the layer is partially impregnated and an intermediate area in the structure is partially filled. The polymer material bonded to the layer forming structure is arranged in the area of the surface supporting the material web viewed over the width direction of the clothing only in a predefined area. The polymer material partially penetrates the layer forming the material web-supporting surface. A first zone (19) forming the predefined area melts within the area of the surface viewed in width direction of the clothing and a second zone (18) free from the polymer material is formed on the polymer material. The first zone is formed from edge area (11, 12) of the clothing in the width directions that are characterized through a constant width in the direction to the middle of the clothing, and the second zone is formed from a middle area of the clothing arranged between the edge areas. The first zone is equipped in the free area from the edge area of the clothing and the second zone is formed from the edge area. The edge areas of the clothing are characterized through a width of 5-150 cm. An equally remaining distribution of the fused polymer material is provided within one of the first zone in thick direction of the clothing and in longitudinal direction. The fused polymer material exists within the first zone in the width direction with homogeneous or inhomogeneous distribution. The individual particles of the particular polymer materials are characterized in the initial condition before the thermal activation by same or different particle geometry and/or size. The particular polymer material is arranged in initial condition before the thermal activation with same particle thick in width direction. The particle size of the polymer material in the initial condition is 50-150 mu m. The polymer material consists of thermoplastic elastomeric polyurethane. The layer forming the material web supporting surface is formed by a fiber fleece structure that is needled with a base layer, which is free from fused polymer material. The fiber fleece structure comprises fleece layers that are characterized through different fiber grades. The layer forming the material web-supporting surface is formed by a polymer layer that extends itself over the surface of the fiber-fleece structure. An independent claim is included for a method for the production of industrial clothing.

IPC 8 full level

**D21F 7/08** (2006.01)

CPC (source: EP US)

**D21F 7/083** (2013.01 - EP US); Y10T 442/2861 (2015.04 - EP US)

Citation (search report)

- [Y] WO 02053832 A1 20020711 - TAMFELT OYJ ABP [FI], et al
- [YD] WO 2004085727 A2 20041007 - VOITH FABRICS PATENT GMBH [DE], et al
- [YD] EP 1757728 A1 20070228 - VOITH PATENT GMBH [DE]
- [Y] EP 1770205 A2 20070404 - VOITH PATENT GMBH [DE]
- [Y] GB 2283991 A 19950524 - SCAPA GROUP PLC [GB]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2088236 A2 20090812**; **EP 2088236 A3 20120627**; CN 201459508 U 20100512; US 2009203277 A1 20090813

DOCDB simple family (application)

**EP 08166855 A 20081017**; CN 200920007266 U 20090206; US 36110809 A 20090128