Title (en)

A LINEAR FLEXIBLE TEXTILE PRODUCT FOR TEXTRONIC APPLICATIONS

Title (de

LINEARES FLEXIBLES TEXTILPRODUKT FÜR TEXTRONISCHE ANWENDUNGEN

Title (fr)

PRODUIT TEXTILE LINÉAIRE SOUPLE POUR APPLICATIONS TEXTILES-ÉLECTRONIQUES

Publication

EP 3094770 A1 20161123 (EN)

Application

EP 14827565 A 20141218

Priority

- PL 40685114 A 20140114
- PL 2014000143 W 20141218

Abstract (en

[origin: WO2015108427A1] The linear flexible textile product for textronic applications, characterized in that on at least one of its surfaces or inside the structure of the flat textile product, manufactured by knitting or weaving technique, conductive elements (3) bonded with the structure of the textile product are placed non-rectilinearly; conductive elements (3) are placed on the surface or inside the structure of the flat textile product in one technological process during knitting or weaving; conductive elements (3) are placed on the surface or inside the structure of the textile product during knitting or weaving along a wavy line, or a wavy and loopy line, or a zigzag line, or a stepped line; in the textile product at least one arrangement of basic threads (6) or (7) is made from elastic yarns; in the knitted product conductive threads (3) are inserted between underlaps (4) and loop legs (5) of loops (2) in a warp-knitted structure, or they form loops, according to a designed pattern; in the woven product conductive threads (3) are bonded with the threads of the basic structure by selected warp threads according to a designed pattern; the conductive element is a wire twisted together with the yarn and additionally wrapped, or wrapped only with the yarn; the conductive threads (3) run along a wavy sinusoid-like pattern, and basic threads (6) are made from a PES 76 dtex texturized elastic yarn, and basic weft threads (7) are made from a PES 150 dtex texturized polyester yarn; and conductive threads (3) of the total linear mass of 840 dtex and maximum linear resistance of 5 Ω/m, are made from composite electroconductive thread containing a copper monofilament plated by silver, of the diameter of 0.07mm, twisted with multifilament polyester yarns.

IPC 8 full level

D04B 21/16 (2006.01)

CPC (source: EP)

D04B 21/16 (2013.01); D10B 2403/0243 (2013.01); D10B 2403/0311 (2013.01)

Citation (search report)

See references of WO 2015108427A1

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