Title (en)

METHOD FOR THE PRODUCTION OF A THREE-LAYER METAL CORD OF THE TYPE THAT IS RUBBERISED IN SITU

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES DREISCHICHTIGEN IN-SITU-GUMMIERTEN METALLSEILS

Title (fr)

PROCÉDÉ DE FABRICATION D'UN CÂBLE MÉTALLIQUE À TROIS COUCHES DU TYPE GOMMÉ IN SITU

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Application

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Abstract (en)

[origin: WO2011144471A1] The invention relates to a method for producing a metal cord having three concentric layers (C1, C2, C3), of construction M+N+P, of the type that is "rubberised in situ", i.e. rubberised from the interior during the production thereof, using rubber or a rubber composition, said cord comprising: a first layer or core (C1) of diameter dc formed by M strand(s) of diameter d1, around which core N strands of diameter d2 are wound together in the form of a helix with a pitch p2 to form a second layer (C2). In addition, P strands of diameter d3 are wound together around this second layer in the form of a helix with a pitch p3 to form a third layer (C3). The method includes the following steps: a step in which the N strands of the second layer (C2) are assembled around the core (C1), so as to form an intermediate cord or "core strand" of construction M +N at a point known as the "assembly point"; a step in which the core and/or the core strand is/are coated with the aforementioned rubber or rubber composition upstream and/or downstream of the assembly point, by means of passage through at least one extrusion head; and a step in which the P strands of the third layer (C3) are assembled around the core strand (M+N) in order to form the cable of construction M+N+P thus rubberised from the interior. The invention is characterised in that the rubber is a melt-extruded unsaturated thermoplastic elastomer, preferably a thermoplastic styrene (TPS) type elastomer, such as an SBS, SBBS, SIS or SBIS block copolymer.

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