

Title (en)

METHOD FOR PRODUCING NETWORK-LIKE METAL MATS AND APPARATUS FOR CARRYING OUT THE METHOD

Title (de)

VERFAHREN ZUR HERSTELLUNG VON NETZARTIGEN METALLMATTEN, VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS SOWIE DERART HERGESTELLTE METALLMATTE

Title (fr)

PROCÉDÉ DE FABRICATION DE TREILLIS MÉTALLIQUES RÉCULAIRES ET DISPOSITIF POUR LA MISE EN OEUVRE DE CE PROCÉDÉ

Publication

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Application

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Abstract (en)

[origin: CA2809043A1] The method serves for producing network-like metal mats from metallic strip material, for which purpose the strip material is first provided with notches (2), running parallel to one another, for the forming of metal wires (1), by means of notching rollers. The notches (2) are thereby formed to such depths, depending on the material, that as far as possible no sliding fractures are formed. The notches (2) are interrupted by unnotched regions - the mutual spacing of which in the respective notch (2) determines the later possible mesh width - at least in such a way that they later form network nodes (4). The network nodes (4) are offset by approximately half a network node spacing in the respectively adjacent notches (2). Then, the strip, formed in this manner, is subjected to a flexing process, in which the webs (3) adjoining the base of the notch and still connecting the metal wires (1) to one another undergo multiple bending deformation about the longitudinal axis thereof in such a way that incipient cracks occur as a result of fatigue fracture. This leads to the complete separation of the metal wires (1) in the region of the webs (3), while no incipient cracks form at the network nodes (4). Finally, the strip material is subjected to transverse tensile forces acting on both its peripheral metal wires (1), whereby a widening deformation of the wire strip (5) into a network-like structure takes place. The invention also relates to an apparatus for carrying out the method and to a metal mat produced by said method.

IPC 8 full level

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