

Title (en)
METHOD AND DEVICE FOR CONTINUOUSLY COATING A STRIP WITH A FLUID FILM HAVING A PRE-DETERMINED THICKNESS AND MADE FROM A CROSSLINKABLE POLYMER THAT IS FREE FROM SOLVENT AND DILUENT

Title (de)
VERFAHREN UND VORRICHTUNG ZUR KONTINUIERLICHEN BESCHICHTUNG EINES STREIFENS MIT EINEM FLUIDFILM VORBESTIMTER DICKE AUS VERNETZBAREM, LÖSUNGS- UND VERDÜNNUNGS MITTELFREIEM POLYMER

Title (fr)
PROCEDE ET DISPOSITIF DE REVETEMENT EN CONTINU D'UNE BANDE PAR UN FILM FLUIDE D'EPAISSEUR PREDETERMINEE EN POLYMERE RETICULABLE EXEMPT DE SOLVANT OU DE DILUANT

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Abstract (en)
[origin: FR2827200A1] A procedure for coating a metal strip with a cross-linking polymer of melting point ≥ 50 deg C comprises passing the strip (B) continuously over at least one support at controlled speed and applying a layer of molten polymer over the strip via a nozzle. The layer is smoothed to give the required coating thickness. The strip is heated prior to coating to a temperature above the melting point of the polymer. A procedure for coating a metal strip such as steel or aluminum, with a cross-linking polymer containing no solvent or diluent and having a melting point above 50 deg C, consists of passing the strip (B) continuously over at least one support (1) at a controlled speed and applying a layer of molten polymer over a part of the strip's width and at a temperature below the reticulation point, using a forced flow nozzle (3). The polymer layer is spread across the whole width of the strip by a smoothing implement (4) with a deformable surface to form a continuously renewed reserve of molten polymer that is smoothed to give the required coating thickness. The smoothing implement can be in the form of a flexible scraper or a roller with a deformable surface, rotated in the same direction as the strip's movement at a relative tangential speed of between 1/10 and 1/100. The strip, which can be coated on both sides, is heated prior to coating to a temperature at or above the polymer's melting point.

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