

Title (en)

CHARACTERIZATION METHOD OF FORMABILITY PROPERTIES OF ZINC ALLOY COATING ON A METAL SUBSTRATE

Title (de)

CHARAKTERISIERUNGSVERFAHREN VON FORMBARKEITSEIGENSCHAFTEN EINER ZINKLEGIERUNGSBESCHICHTUNG AUF EINEM METALLSUBSTRAT

Title (fr)

PROCÉDÉ DE CARACTÉRISATION DE PROPRIÉTÉS DE FORMABILITÉ D'UN REVÊTEMENT D'ALLIAGE DE ZINC SUR UN SUBSTRAT MÉTALLIQUE

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Application

EP 20764085 A 20200831

Priority

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Abstract (en)

[origin: WO2021038102A1] The present invention relates to a method for the characterisation of formability properties of a zinc alloy coating on a metal substrate and a metal substrate comprising a zinc alloy coating. The method for the characterisation of formability properties of a zinc alloy coating on a metal substrate, the zinc alloy coating containing one or more alloying elements selected from the group consisting of Mg, Al, Ni each with a content of at least 0.3 weight % and at most 10 weight %, optionally one or more additional elements selected from the group consisting of Si, Sb, Pb, Ti, Ca, Mn, Sn, La, Ce, Cr, or Bi, wherein the content by weight of each additional element in the metallic coating is less than 0.3 weight %, inevitable impurities, the remainder being zinc, the zinc alloy coating having a microstructure comprising a primary zinc phase and binary eutectic and/or ternary eutectic phases, wherein Electron Backscatter Diffraction (EBSD) is used to determine a crystallographic orientation-dependent strain hardening exponent (n) of the zinc alloy coating microstructure.

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CPC (source: EP KR)

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