

Title (en)
ALLOY SUBSTRATE WITH EXTERIOR COAT

Title (de)
LEGIERUNGSSUBSTRAT MIT AUSSENBSCHICHTUNG

Title (fr)
SUBSTRAT EN ALLIAGE À REVÊTEMENT EXTÉRIEUR

Publication
EP 3478873 A4 20200318 (EN)

Application
EP 16918429 A 20161005

Priority
US 2016055598 W 20161005

Abstract (en)
[origin: WO2018067148A1] Examples relating to coating an alloy substrate are described. For example, techniques for treating a surface of the alloy substrate for coating the alloy substrate with an exterior coat include providing an alloy substrate of a die-casted metal alloy, the alloy substrate having a surface with multiple pores, and applying an electrically conductive layer on the surface of the alloy substrate. The electrically conductive surface is composed of metal particles and electrically conductive polymers, and the electrically conductive layer is applied such that the metal particles fill the multiple pores on the surface of the alloy substrate. Thereafter, an oxidation process is performed on the surface to form an oxidation layer over the surface. The oxidation layer provides for adhesion of the surface with the exterior coat.

IPC 8 full level
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Citation (search report)
• [A] MURAT ATES: "A review on conducting polymer coatings for corrosion protection", JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, vol. 30, no. 14, 18 February 2016 (2016-02-18), GB, pages 1510 - 1536, XP055665145, ISSN: 0169-4243, DOI: 10.1080/01694243.2016.1150662
• [A] HERRASTI P ET AL: "Effect of the polymer layers and bilayers on the corrosion behaviour of mild steel: Comparison with polymers containing Zn microparticles", PROGRESS IN ORGANIC COATINGS, ELSEVIER BV, NL, vol. 54, no. 4, 1 December 2005 (2005-12-01), pages 285 - 291, XP027868888, ISSN: 0300-9440, [retrieved on 20051201]
• See references of WO 2018067148A1

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