

Title (en)

Process for forming at the surface of an aluminium alloy a zone rich in aluminium of at least one of the elements nickel, iron, cobalt.

Title (de)

Verfahren zum Formen einer auf der Oberfläche eines Substrates aus einer Aluminiumlegierung befindlichen Zone, die reich ist an einem Aluminid von mindestens einem der Elemente Nickel, Eisen, Kobalt.

Title (fr)

Procédé pour former à la surface d'un substrat en alliage d'aluminium une zone riche en aluminure d'au moins un des éléments nickel, fer, cobalt.

Publication

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Application

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Priority

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Abstract (en)

The invention relates to a process for forming at the surface of an aluminium alloy substrate a region rich in aluminide of at least one of the elements nickel, iron, cobalt. The process consists in performing an electrochemical deposition of at least one of the elements on the substrate without using an intermediate coat and then subjecting the whole to a diffusion heat treatment at a temperature above the initial melting temperature of at least one of the intermetallic compounds present in the substrate. It makes it possible to improve the hardness and the resistance to wear, to oxidation and to corrosion, as well as the elasticity modulus of aluminium alloy substrates. <IMAGE>

IPC 1-7

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IPC 8 full level

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Citation (search report)

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