

Title (en)

OXIDISING ELECTROLYTIC METHOD FOR OBTAINING A CERAMIC COATING AT THE SURFACE OF A METAL

Title (de)

ELEKTROLYTISCHES OXIDATIONS-VERFAHREN ZUR ERLANGUNG EINER KERAMISCHEN BESCHICHTUNG AUF EINER METALLOBERFLÄCHE

Title (fr)

PROCEDE ELECTROLYTIQUE D'OXYDATION POUR L'OBTENTION D'UN REVETEMENT CERAMIQUE A LA SURFACE D'UN METAL

Publication

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Application

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Abstract (en)

[origin: WO0181658A1] The invention concerns a method for obtaining a ceramic coating at the surface of a metal, having semiconductor properties, such as aluminium, titanium, magnesium, hafnium, zirconium and their alloys, by physico-chemical reaction transforming the treated metal. Said method consists in immersing the metallic piece (5) to be coated in an electrolytic solution (3) consisting of an aqueous solution of alkali metal hydroxide, such as potassium or sodium, and an alkali metal oxyacid salt, the metallic piece forming one of the electrodes, and in applying to the electrodes a signal generally triangular in shape, that is having at least a front slope and a rear slope, with variable shape factor during the process, generating a current controlled in intensity, its shape and its ratio between positive intensity and negative intensity.

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WO 0181658 A1 20011101; AT E517200 T1 20110815; AU 5640701 A 20011107; AU 775598 B2 20040805; BR 0110339 A 20031230; CA 2405485 A1 20011101; CN 100482867 C 20090429; CN 1426496 A 20030625; EP 1276920 A1 20030122; EP 1276920 B1 20110720; FR 2808291 A1 20011102; FR 2808291 B1 20030523; IL 152307 A0 20030529; IL 152307 A 20060705; JP 2003531302 A 20031021; KR 100868547 B1 20081113; KR 20030011316 A 20030207; RU 2268325 C2 20060120; US 2002112962 A1 20020822; US 6808613 B2 20041026

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