

Title (en)

DEVICE FOR NITRIDING BY IONIC IMPLANTATION OF AN ALUMINIUM ALLOY PART, AND CORRESPONDING METHOD

Title (de)

VERFAHREN ZUR NITRIERUNG EINES TEILS AUS ALUMINIUMLEGIERUNG DURCH IONENIMPLANTATION UND ENTSPRECHENDES VERFAHREN

Title (fr)

DISPOSITIF ET PROCEDE D' IMPLANTATION IONIQUE D'UNE PIECE EN ALLIAGE D'ALUMINIUM

Publication

**EP 1725694 A2 20061129 (FR)**

Application

**EP 05717536 A 20050202**

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Abstract (en)

[origin: WO2005085491A2] The invention relates to a device for implanting ions in an aluminium alloy part (5), said device comprising an ion source (6) supplying ions accelerated by an extraction voltage, and first means for regulating (7-11) an initial beam (f1') of ions emitted by said source (6) to form an implantation beam (f1). The source (6) is an electronic cyclotron resonance source generating the initial beam (f1') of multi-energy ions that are implanted in the part (5) at a temperature below 120 DEG C. The implantation of said multi-energy ions of the implantation beam (f1) regulated by the regulating means (7-11) is simultaneously carried out at a depth controlled by the extraction voltage of the source.

IPC 8 full level

**C23C 8/36** (2006.01); **C23C 14/48** (2006.01)

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