

Title (en)

METHOD FOR ELECTROCHEMICAL SURFACE TREATMENT OF BIOMEDICAL PRODUCTS MADE OF TITANIUM OR Ti-BASED ALLOYS

Title (de)

VERFAHREN ZUR ELEKTROCHEMISCHEN OBERFLÄCHENBEHANDLUNG VON BIOMEDIZINISCHEN PRODUKTEN AUS TITAN ODER Ti-BASIERTEN LEGIERUNGEN

Title (fr)

PROCÉDÉ DE TRAITEMENT DE SURFACE ÉLECTROCHIMIQUE DE PRODUITS BIOMÉDICAUX EN TITANE OU EN ALLIAGES À BASE DE TI

Publication

**EP 4332278 A1 20240306 (EN)**

Application

**EP 22193733 A 20220902**

Priority

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Abstract (en)

The invention relates to the method for electrochemical surface treatment of biomedical product made of titanium or Ti-based alloys characterized in that it comprises the steps: Immersion of the degreased and cleaned biomedical product into the electrolyte consisting of Reline or Glyceline; galvanostatic etching treatment of the biomedical product at the current density 1 to 20 mA cm<sup>-2</sup> for 5 to 60 min. at a temperature 15 to 40 °C or potentiostatic etching treatment of the biomedical product at the potential 1 to 5 V for 5 to 60 min. at a temperature 15 to 40 °C; or galvanostatic electropolishing of the biomedical product at the current density 25 to 100 mA cm<sup>-2</sup> for 5 to 60 min. at a temperature 15 to 40 °C or potentiostatic electropolishing of the biomedical product at the potential 6 to 30 V for 5 to 60 min. at a temperature 15 to 40 °C; and subsequent cleaning of the biomedical product from electrolytes residuals.

IPC 8 full level

**C25F 3/08** (2006.01); **C25F 3/26** (2006.01)

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Citation (applicant)

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