

Title (en)

APPARATUS FOR DEPOSITING METAL ON THE FRICTIONAL PART OF A TURBINE ROTOR

Publication

**EP 0165408 B1 19880831 (FR)**

Application

**EP 85104889 A 19850423**

Priority

FR 8406589 A 19840426

Abstract (en)

[origin: US4584081A] The apparatus is particularly intended for depositing chromium on the bearing surfaces of bearings and end stops of turbine rotors made of chromium steel in order to obtain a good coefficient of friction thereon. The apparatus comprises a vat (1) having a vertical axis 00' constituted by a cylindrical portion (2) terminated by a conical portion (3), said vat (1) being filled with electrolyte, first means (7, 8) disposed near the top of said vat (1) for feeding the vat (1) with electrolyte, second means (4) situated at the bottom of the vat (1) for emptying the electrolyte, third means (32, 33) situated between the second means (4) and the first means (7, 8) for regenerating and circulating the electrolyte, fourth means (15) for supporting a curtain of anodes (17) made of the metal to be deposited and for rotating the electrolyte about the axis 00', and fifth means (29) for applying current of given polarity to the curtain of anodes (17). The apparatus is characterized in that said fourth means (15) are constituted by two cylindrical half-shells (16) about the axis 00', each including a semi-circular frame (18) on which the anodes (17) are fixed parallel to the axis 00', said anodes (17) being surrounded on the outside by hollow tubes (21) parallel to 00' and interconnected by hollow conduits (22) which are likewise semi-circular in shape and which are fed with compressed gas, the conduits (22) and the frames (18) being fixed to one another by insulators (23), and the tubes (21) and the conduits (22) being fitted with nozzles (26, 27) which eject compressed gas in horizontal directions at angles close to 45 DEG with the horizontal lines joining the respective nozzles (26, 27) to the axis 00'.

IPC 1-7

**C25D 7/04**

IPC 8 full level

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