Title (en)

METHOD AND APPARATUS FOR METAL PLATING OF CYLINDRIC BORES WITH LARGE DIAMETER EXTENDING ACROSS THE CENTRAL PART OF A WORK PIECE HAVING LARGE DIMENSIONS

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Application

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Priority

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Abstract (en)

[origin: US4345977A] A method and apparatus for depositing a metal on a large-diameter cylindrical bore which passes right through the central portion of a large part. The invention consists in placing and centering the large part (1) between an upper tank (4) and a lower tank (3), so as to define a chamber (8) inside which the bore (2) is disposed and outside which the peripheral portions (9) of the part (1) extend, said chamber being filled with electrolyte. The electrolyte is homogenized and regenerated continuously outside the chamber (8) before being injected in the chamber (8) and before being entrained in a spirally descending motion to the level of the bore (2). The metal deposit takes place under the effect of a direct current which circulates between metal anodes (14) disposed in the bore (2) and the part (1) which serves as a cathode. The invention is used for depositing nickel on the bores of turbine rotor wheels so as to adjust dimensions or prevent fretting corrosion.

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