Title (en)

Electric arc treatment of parts.

Title (de

Elektrische Lichtbogenbehandlung von Teilchen.

Title (fr)

Traitement d'arc électrique de particules.

Publication

EP 0468110 B1 19950628 (EN)

Application

EP 90308105 A 19900724

Priority

EP 90308105 A 19900724

Abstract (en)

[origin: EP0468110A1] A part being treated, e.g. cleaned, and one or more electrodes are connected to a power supply and an arc discharge is initiated at a pressure below 10 Pa between the part and the electrode(s) in the mode of a drooping portion of the voltage-ampere characteristic of the arc or using a power supply charging a drooping external volt-ampere characteristic. In one precedure, during arcing, a difference of potentials of electric field approximately equal to zero is created on the treatment zone of the part and/or on the working surface of the electrode(s) and the area of movement of the arc plasma is limited to the said zone and/or the said working surface. In another procedure, a difference of potentials other than zero is created, areas with the highest and/or lowest potential being moved along the treatment zone and/or working surface, and the area of movement of the arc plasma being limited to the treatment zone and/or working surface. In another procedure the region of the arc discharge in the space between the part and the electrode(s) is positively compressed or partly restricted, and the said region and the part are moved relative to each other according to a predetermined program. <IMAGE>

IPC 1-7

B08B 7/00; H05H 1/48

IPC 8 full level

B08B 7/00 (2006.01); H05H 1/48 (2006.01)

CPC (source: EP US)

H05H 1/48 (2013.01 - EP US)

Citation (examination)

& JP-A-1 218 626 (HITACHI LTD) 31 August 1989

Cited by

EP0565726A4; DE102009052436A1; EP0560526A1; US5393575A; AU677214B2; US11073479B2; DE202009018474U1; WO0100337A1; WO9822231A1; WO2017103341A3

Designated contracting state (EPC)

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