

Title (en)

DEVICE FOR CLEANING THE SURFACE OF A COMPONENT

Title (de)

VORRICHTUNG ZUM SÄUBERN DER FLÄCHE EINER KOMPONENTE

Title (fr)

DISPOSITIF DE NETTOYAGE D'UNE SURFACE D'UNE PIECE

Publication

EP 1511582 A2 20050309 (FR)

Application

EP 03760019 A 20030612

Priority

- FR 0301768 W 20030612
- FR 0207263 A 20020613

Abstract (en)

[origin: FR2840837A1] The component (1) is cleaned by a laser (4) emitting a beam (5) directed towards the surface (3). A vacuum device (6) has a conduit (8) directed towards the surface, for removal of debris. The conduit may be replaced by an electrode point, so that debris removal is by electrostatic attraction, rather than air flow. The component (1) to be decontaminated is mounted on a table which is mobile in the X-Y plane, with the surface (3) to be cleaned uppermost. Cleaning is achieved by a laser (4) emitting a beam (5) directed towards the surface (3). A vacuum device (6) comprises a pump (7) and a conduit (8) directed towards the surface, specifically at the point where the laser beam is operating. A filter (9) may be added in to the conduit or adjacent to the pump. In an alternative arrangement, the conduit may be replaced by an electrode point, with a suitably polarized high voltage to attract the particles which are dislodged from the surface of the component. In this case the distance between the point and the surface is a few hundred micrometers, for a potential difference of between tens of volts and kilovolts.

IPC 1-7

B08B 7/00

IPC 8 full level

B08B 7/00 (2006.01)

CPC (source: EP US)

B08B 7/0042 (2013.01 - EP US)

Citation (search report)

See references of WO 03106060A2

Cited by

WO2011072992A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2840837 A1 20031219; FR 2840837 B1 20041126; EP 1511582 A2 20050309; US 2006154495 A1 20060713; WO 03106060 A2 20031224; WO 03106060 A3 20040401

DOCDB simple family (application)

FR 0207263 A 20020613; EP 03760019 A 20030612; FR 0301768 W 20030612; US 51627704 A 20041129