

Title (en)

AN ULTRA-HIGH-PRESSURE WATER JETTING (UHPWJ) HYDRO-BLASTING CLEANING SYSTEM FOR SURFACES OF VERY LARGE DIMENSIONS AND/OR OF COMPLEX SHAPES AND/OR OF DIFFICULT ACCESS AND/OR WITH A HIGH ELEVATION

Title (de)

HYDROSTRAHLREINIGUNGSSYSTEM MIT ULTRAHOCHDRUCKWASSERSTRAHL FÜR OBERFLÄCHEN SEHR GROSSER ABMESSUNGEN UND/ODER KOMPLEXER FORMEN UND/ODER MIT SCHWIERIGEM ZUGANG UND/ODER IN HOHER LAGE

Title (fr)

SYSTÈME DE NETTOYAGE PAR HYDROSOUFFLAGE DE JET D'EAU À ULTRA-HAUTE PRESSION (UHPWJ) POUR SURFACES DE TRÈS GRANDES DIMENSIONS ET/OU DE FORMES COMPLEXES ET/OU D'ACCÈS DIFFICILE ET/OU À ÉLÉVATION ÉLEVÉE

Publication

EP 3643414 A1 20200429 (EN)

Application

EP 18425080 A 20181025

Priority

EP 18425080 A 20181025

Abstract (en)

The present invention concerns a Ultra-High Pressure Water Jetting (UHPWJ) hydro-blasting/cleaning system (1) for surfaces (P) of very large dimensions and/or complex shapes and/or difficult access and/or with a high elevation. The UHPW system includes a rotating cleaning head (4) which can be kept in contact with the surface to be hydro-blasted/cleaned and sucking means which are judiciously physically separated, i.e. a cyclone type device (5) which is mounted on the mobile robot (2) and therefore can separate the gas phase from the liquid and solid phases, very near to the hydro-blasting/cleaning head, while minimizing the flow pressure drop, and a vacuum suction device (6) that is placed up to a significant distance from the cleaning head and generates the depression that drives the three-phase mixture into the cyclone.

IPC 8 full level

B08B 3/02 (2006.01); **B08B 9/023** (2006.01)

CPC (source: EP)

B08B 9/023 (2013.01); **B08B 3/024** (2013.01); **B08B 3/14** (2013.01)

Citation (applicant)

- US 5528789 A 19960625 - ROSTAMO GARY [US]
- JP 2001096246 A 20010410 - TOA HARBOR WORKS CO LTD, et al
- CN 101069890 A 20071114 - UNIV ZHEJIANG [CN]
- US 6026538 A 20000222 - WATANABE YASUO [JP]

Citation (search report)

- [A] US 2016016205 A1 20160121 - BONNEAU JEAN-PIERRE [FR], et al
- [A] WO 2012094767 A1 20120719 - AUTOMATIC COATING LTD [CA], et al
- [A] US 5743969 A 19980428 - LAWLER OLIVER WAYNE [US]
- [A] EP 0710511 A1 19960508 - CRC EVANS REHABILITATION SYST [US]
- [A] US 2011030740 A1 20110210 - BAMFORD BRAD [CA]
- [A] DE 4404230 A1 19950817 - MAX STEINHART GMBH PFLASTER UN [DE]
- [A] FR 3036635 A1 20161202 - JMC ENVIRONNEMENT [FR]
- [A] US 5136969 A 19920811 - CHAPMAN GORDON R [US]
- [A] FR 2750898 A1 19980116 - COGEMA [FR]
- [A] FR 2698021 A1 19940520 - ONET [FR]
- [A] WO 2015164809 A1 20151029 - WATERBLASTING LLC [US]
- [A] EP 0670781 A1 19950913 - SJOEBERG STAFFAN [SE]

Cited by

CN115653019A; CN112254014A; CN117161007A; CN117718270A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3643414 A1 20200429; EP 3643414 B1 20230607; EP 3643414 C0 20230607

DOCDB simple family (application)

EP 18425080 A 20181025