

Title (en)

ROBOTIC CLEANING APPARATUS AND RELATED METHODS

Title (de)

ROBOTISCHE REINIGUNGSVORRICHTUNG UND VERWANDTE VERFAHREN

Title (fr)

APPAREIL DE NETTOYAGE ROBOTIQUE ET PROCÉDÉS ASSOCIÉS

Publication

EP 3415064 A1 20181219 (EN)

Application

EP 18166055 A 20180406

Priority

- US 201762520803 P 20170616
- CN 201710683758 A 20170811
- CN 201810205158 A 20180313
- US 201815919798 A 20180313

Abstract (en)

A robotic cleaning apparatus (100) for cleaning a dirty object (104) includes a cleaning head (124) and an articulated body (116). The articulated body (116) is coupled to the cleaning head (124) and mountable to the dirty object. The body (116) has one or more actuators (136) that collectively move the cleaning head (124) into contact with surfaces of the dirty object (104). The one or more actuators (136), when activated, collectively rotate the cleaning head (124) relative to the dirty object (104) about first and second axes, and translate the cleaning head relative to the dirty object along an extension axis. A method of robotically cleaning is also disclosed.

IPC 8 full level

A47K 17/00 (2006.01); **B25J 11/00** (2006.01); **B25J 13/00** (2006.01); **B25J 18/02** (2006.01); **E03D 9/00** (2006.01); **G05D 1/02** (2006.01)

CPC (source: EP)

A47K 17/00 (2013.01); **E03D 9/002** (2013.01)

Citation (search report)

- [XI] US 2016158942 A1 20160609 - AUGENBRAUN JOSEPH ELLIS [US], et al
- [XI] CN 106400917 A 20170215 - YANG DING
- [XAI] EP 2910695 A1 20150826 - IND DE THERMOFORMAGE ET MÉCANO SOUDURE SOCIÉTÉ ANONYME [FR]
- [A] JP 2003125979 A 20030507 - ANZAI SHOJI
- [A] DE 202012002839 U1 20130625 - VIEGA GMBH & CO KG [DE]

Cited by

US2021388590A1

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 3415064 A1 20181219

DOCDB simple family (application)

EP 18166055 A 20180406