(12) PATENT APPLICATION PUBLICATION   (21) Application No.201711003499 A

(19) INDIA

(22) Date of filing of Application :31/01/2017   (43) Publication Date : 03/08/2018

(54) Title of the invention : ADVANCED AUTONOMOUS WALL PAINTING MACHINE FOR HIGH RISE BUILDINGS

(51) International classification	:B24B53/075	(71)**Name of Applicant :**
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(33) Name of priority country	:NA	National Highway (NH-64), Tehsil-Rajpura, District-Patiala,
(86) International Application No	:NA	Punjab, India-140401. Email- director@chitkara.edu.in Landline
Filing Date	:NA	No-01762-507084 Punjab India
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(57) Abstract :
In the present invention, inventors have developed an electronic advance autonomous wall crawling device exclusively used for painting purpose. For sticking the device with wall, suction cups with self-counter are used. Vertical and horizontal slider rails are available through which whole device can move in conjugation with pneumatic cylinders. The movement mechanism on the wall is either manually with the help of PLC control unit or autonomous with the help of sensors which not only detects and avoids the various obstacles but also calculates the required area to be painted. The device is embedded with device learning algorithm. Power unit and paint repository are kept separately and connected through wires and pipes respectively with the device. An air balloon protection system is also embedded with the device in conjugation with the acceleration sensor which avoids the free fall from the wall for any unexpected reason during painting operation.

No. of Pages : 19 No. of Claims : 4