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(57) Abstract :

The Automated fastener cleaning device comprising of, a portable body 1 configured into a first 2 and second portion 3, the first 2 portion includes an iris lid 4 for allowing a user to insert a fastener 5 inside body 1 manually through opening, an AI based imaging unit 6 installed in second portion 3 in connection with a microcontroller for detecting dirt sticking along thread pitch of fastener, a corrosion sensor attached to first portion 2 connected to microcontroller for analyzing rate of corrosion leading to material deterioration of fastener, a cleaning tool 7 arranged on second portion 3 operated through microcontroller for cleaning dirt and corrosion debris deposited on fastener as per output provided by sensors, a sprayer 8 attached to second portion 3 in connection with microcontroller for spraying anti-corrosive fluid over fastener in order to maintain friction free threads for fastening purposes. Ref. Figure 1

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