

(54) Title of the invention : INVERTER BATTERY MAINTENANCE DEVICE

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(57) Abstract :

An inverter battery maintenance device, comprises of a housing 101 configured to be mounted on an inverter battery, a plurality of electromagnetic clamps 102 installed at opposite ends of the housing 101 for secure attachment, an battery cap handling module integrated at a bottom portion of the housing 101 for gripping, rotating, and operating reservoir caps, a pneumatic rod 107 with motorized two-axis slider 103 and integrated with level sensor for detecting water levels, a water chamber 108 filled with deionized water connected to an electronic nozzle 109 for automatic refilling of the battery reservoir, an AI camera 113 utilizing image processing protocols to detect carbon accumulation on battery terminals, a carbon cleaning module for removing carbon deposits from the battery terminals, and a control unit configured to control and synchronize the operation of all modules.

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