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(57) Abstract :

The present disclosure relates to an automated robot charging system 100 that comprises a hybrid switch 102 to give power output. The hybrid switch 102 comprises a sensor 104 to sense data indicative of location and availability of switch 102 for charging a robot 106. The robot 106 comprises an integrated charging unit 108 that couples with the hybrid switch 102 for charging. Additionally, the system 100 includes a server 110 communicatively coupled with the switch 102 and robot 106, where the server 110 receives the sensed data from the switch 102, and further receives a data from the robot 106. The server 110 issues an instruction to the robot 106 to move back to the hybrid switch 102 for charging based on the charging status and the usage information of the robot 106 and availability of switch 102.

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