(19) INDIA

(22) Date of filing of Application :31/10/2022 (43) Publication Date : 03/05/2024

## (54) Title of the invention: SAFE AND SMART MULTI-PLUG EXTENSION BOARD

(51) International classification	G01C0021360000, G06F0001160000,	(71)Name of Applicant: 1)Chitkara University Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala Punjab India
(31) Priority Document No	:NA	2)Chitkara Innovation Incubator Foundation
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)KAUR, Amandeep
(86) International Application No	:NA	2)THAPLIYAL, Arpan
Filing Date	:NA	3)MITTAL, Vasu
(87) International Publication No	: NA	4)KOUL, Aditya
(61) Patent of Addition to Application Number Filing Date	:NA :NA	5)MITTAL, Tarun
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The invention provides system for detecting and reporting voltage and current variations in a multi-plug extension board. The system comprises of sensors (112) to detect the current and voltage variations in the sockets, a display unit (106) to display the values and use status. The system is connected to a network to notify users by sending a warning voice message to device connected when the voltage range exceeds threshold and executes auto-cut-off to terminate the power from flowing through the multiple sockets in case of no action from the users after warning issue. The system also executes real time feedback to the user's natural language queries.

No. of Pages: 18 No. of Claims: 7