(19) INDIA

(22) Date of filing of Application: 08/07/2025

(43) Publication Date: 25/07/2025

## (54) Title of the invention: MULTIFUNCTIONAL POWER BANK

:H02J7/00, H02J7/35, G06F21/32, (51) International classification G06N3/08 (86) International Application No :NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application :NA Number :NA Filing Date (62) Divisional to Application Number :NA Filing Date :NA

(71)Name of Applicant: 1)Chitkara University

Address of Applicant :Chandigarh-Patiala National Highway, Village Jhansla,

Rajpura, Punjab - 140401, India. Rajpura -----

2)Chitkara Innovation Incubator Foundation

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Kamini

Address of Applicant :Research Scholar, Chitkara University Research & Innovation Network (CURIN), Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----

2)Akashdeep Singh

Address of Applicant: Department of Computer Science & Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura ----------

3)Shalli Rani

Address of Applicant: Professor, Chitkara University Research & Innovation Network (CURIN), Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura --------

## (57) Abstract:

A multifunctional power bank, comprising a rectangular housing 101, a finger scanner 114 to authenticate a user of power bank, multiple overlapping sliders 102 to extend size of rectangular housing 101 according to dimensions of device to be charged as detected by an artificial intelligence (AI)-enabled camera 112 and an optical laser sensor, a first module for charging first type of electronic devices, a second module for charging second type of electronic device, a pair of horizontal sliders 110 to adjust position of charging pins 108 depending on positioning of charging port over devices to be charged, a pair of pneumatic pins 111 extend and reduce their length depending on engagement of charging ports 104, a touch enabled display 113 enables user to input information about battery level, after charging.

No. of Pages: 23 No. of Claims: 9