(43) Publication Date: 16/08/2024

(19) INDIA

(22) Date of filing of Application :09/02/2023

(54) Title of the invention: INTERNET OF THINGS BASED DEVICE AND METHOD FOR DETECTION OF MAJOR DEPRESSIVE DISORDER

(51) International classification	:A61B0005000000, A61P0025240000, A61B0005160000, A61B0005369000, G06N0003080000	(71)Name of Applicant: 1)CHITKARA INNOVATION INCUBATOR FOUNDATION Address of Applicant: SCO: 160-161, SECTOR – 9C, MADHYA MARG, CHANDIGARH – 160009, INDIA (IN) Chandigarh Chandigarh India (72)Name of Inventor:
(31) Priority Document No	:NA	(/2)Name of inventor: 1)Chetna Gupta
(32) Priority Date	:NA	2)Dr. Vikas Khullar
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract:

An Internet of Things (IoT) based device (100) for detection of Major Depressive Disorder (MDD) is disclosed. The device (100) is a handheld and automated device to screen Electroencephalography (EEG) input signal for detection and classification of Major Depressive Disorder (MDD) through already trained deep learning models. The device (100) firstly gathers EEG signals from an input unit (102). Further, the device (100) feeds the gathered EEG signals to a processing unit (104) for classification of the MDD in real time to predict an output selected from "depression" or "no depression" by using a trained deep learning technique. Furthermore, the device (100) displays the predicted output on a display unit (108). Claims: 10, Figures: 3 Figure 1 is selected.

No. of Pages: 19 No. of Claims: 10