(12) PATENT APPLICATION PUBLICATION

(22) Date of filing of Application :28/07/2022

## (54) Title of the invention : HEAD-MOUNTED DEVICE WITH VIRTUAL REALITY-INDUCED ACTIONS (71)Name of Applicant : 1)Chitkara University Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ------ -----2)Chitkara Innovation Incubator Foundation :G02B0027010000, G06F0003010000, (51) International Name of Applicant : NA G06F0001160000, A61L0009120000, classification Address of Applicant : NA A63F0013280000 (72)Name of Inventor : (86) International :NA 1)KAUR, Amanpreet Application No Address of Applicant : Chitkara University, Chandigarh-Patiala :NA Filing Date National Highway, Village Jhansla, Rajpura, Punjab - 140401, (87) International India. Patiala ------: NA Publication No 2)DATTA, Privanka (61) Patent of Addition :NA Address of Applicant : Chitkara University, Chandigarh-Patiala to Application Number :NA National Highway, Village Jhansla, Rajpura, Punjab - 140401, Filing Date India. Patiala -----(62) Divisional to :NA **3)SINGH, Narinder Pal** Application Number :NA Address of Applicant : Chitkara University, Chandigarh-Patiala Filing Date National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----4)MANTRI, Archana Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract :

A portable head-mounted device 100 comprises a virtual reality display module 104, a mechanism with a spray nozzle 108 releasing one fragrance at a time, an array of ultrasonic transducers 102 to provide mimic sensation, a sensor 110 based thermoelectric unit 114 to provide bidirectional thermal stimulus, and a control unit 124 receiving input signals, through a network 122, processing the input signals and correspondingly transmitting output signals to the thermoelectric unit 114, ultrasonic transducers 102, and fragrance cartridges 106 to act as per the requirement of the virtual reality platform.

No. of Pages : 13 No. of Claims : 9