

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411023630 A

(19) INDIA

(22) Date of filing of Application :25/03/2024

(43) Publication Date : 26/04/2024

(54) Title of the invention : PORTABLE DEVICE FOR SCLERAL CONTACT LENS FITTING

(51) International classification :A61B0003000000, A61B0003135000, G06Q0030060000, G02C0007040000, A61B0003107000

(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

(71)Name of Applicant :

1)Chitkara University

Address of Applicant :Chitkara University, 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)Krishna Kumar Gupta

Address of Applicant :Department of Optometry, Chitkara school of Health Sciences , Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Ritika Rana

Address of Applicant :Department of Optometry, Chitkara school of Health Sciences , Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

(57) Abstract :

The present disclosure introduces portable scleral contact lens fitting device. represents a significant advancement in optometric technology, addressing the challenges associated with fitting scleral lenses for patients with irregular corneas. Integrating state-of-the-art components such as a slit lamp adapter 102, image acquisition unit 104, image processor 106, database 108, Bluetooth/Wi-Fi connectivity module 110, display device 112, Artificial intelligence unit 114 and user interface 116, this device offers a comprehensive system for practitioners. By capturing high-resolution images and real-time video of the ocular surface, analyzing key parameters, and accessing a database of scleral lens types, the device provides personalized recommendations for optimal lens selection. REFERENCE FIG 1

No. of Pages : 25 No. of Claims : 10