(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311017997 A

(19) INDIA

(22) Date of filing of Application: 16/03/2023 (43) Publication Date: 31/03/2023

(54) Title of the invention : SYSTEM FOR IMAGE RECOGNITION BASED ORTHOKERATOLOGY LENS FITTING AND METHOD THEREOF

(51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number	:A61K 450600, A63B 604200, G02B 070200, G02C 070400, G06Q 300600 :NA :NA : 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)Mr. Krishna Kumar Gupta
Filing Date	:NA	1
(62) Divisional to Application Number Filing Date	:NA :NA	Address of Applicant :Department of Optometry, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura

(57) Abstract:

The present invention provides an image recognition-based orthokeratology lens fitting method and system for automatic fitting. The method comprising: obtaining keratometry data having corneal topography and corresponding corneal curvature data of a user and inputting the keratometry data into a storage medium; selecting a diagnostic trial lens for the user; placing the diagnostic trial lens and sodium fluorescein in eye of the user to form a pattern captured by the image recognition device; superimposing the pattern to the keratometry data and decide the fitting of the diagnostic trial lens based on the movement of lens on the eye thereby finalizing the lens prescription and type. It provides a system having an image acquisition device, an image processing unit, a orthokeratology lens fitting device and a display unit.

No. of Pages: 20 No. of Claims: 8