(19) INDIA

(22) Date of filing of Application :28/05/2022 (43) Publication Date: 16/12/2022

(54) Title of the invention: APPARATUS TO MEASURE INTERPUPILLARY DISTANCE AND NEAR POINT OF **CONVERGENCE**

:A61B0005000000, H04N0005232000, (51) International A61B0003110000, A61B0003000000, classification

G06K0009000000

(86) International :NA Application No :NA Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA Filing Date

(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

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

1)SINGH, Sachitanand

Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

2)GUPTA, Krishna Kumar

Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

3)RANJAN, Jai Prabhat

Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

4) GUPTA, Sheifali

Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

5)GUPTA, Rupesh

Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract:

The present invention relates to an apparatus (100) for automatically measuring interpupillary distance (IPD) and near point of convergence (NPC), thus reducing chances of human error. The apparatus (100) having a T-shaped structure and includes an image acquisition unit (110) and a processing unit (116). The image acquisition unit (110) configured to acquire image and video data of face of the subject, and face of the subject positioned at a frame (114) of the apparatus (100). The processing unit (116) automatically moves the image acquisition unit (110) to acquire accurate measurement of IPD and NPC, and also, moves the frame to adjust eye level based on the image acquisition unit (110). The apparatus (100) provides audio instructions also to enable the subject to perform test easily.

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