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## (54) Title of the invention: SYSTEM AND METHOD FOR DETERMINING THE DEPRESSION SCORE OF THE SUBJECTS

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## (57) Abstract:

The present disclosure relates to a system (200) for determining the depression score of the subjects, the system includes a device (100) having an optic ophthalmoscope (104) that is mounted on a slit lamp base (102). A computing device (106) coupled to the optic ophthalmoscope to capture one or more fundus images of the eye. A processor (202) configured to receive the one or more fundus images of the eye of the subject, pre-process the fundus images, segment the contrast-enhanced image and convert it to binary form for vessel density analysis, extract a set of features from the segmented images and classify the extracted set of features, wherein based on the combination of classification of the extracted set of features, the processor is configured to calculate the depression score of the subject.

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