CLAIMS

1. A method for evaluating spectacle lenses by an evoked activity of a visual cortex of a subject's brain, the method comprising:

presenting the subject with a visual stimulus object for observation at a peripheral part away from a fixation point to which attention of the subject is paid, wherein the subject is wearing a lens to be evaluated while observing the visual stimulus object, and wherein the visual stimulus object evokes an activity of a specific part of the brain's visual cortex;

measuring the evoked activity of the specific part of the brain's visual cortex as a change in at least one of an electric potential or a magnetic field of the brain's visual cortex when the visual stimulus object is visually observed by the subject through the lens to be evaluated, wherein the evoked activity is measured using an electroencephalograph, a magnetoencephalograph, or a combination thereof;

determining an evaluation index for the lens to be evaluated from the measured evoked activity by calculating a magnitude of the change in at least one of the electric potential or magnetic field and a latency in response of the visual cortex to the visual stimulus; and

evaluating the performance of the lens relative to the subject based on the evaluation index.

2. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1,

wherein measuring the evoked activity includes separating an evoked activity of a primary visual cortex or an evoked activity of a secondary visual cortex from the evoked activity of the brain's visual cortex; and

wherein evaluating the performance of the lens relative to the subject is based on an evaluation index of the evoked activity of the primary visual cortex separated therefrom or the evoked activity of the secondary visual cortex separated therefrom.

3. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein the visual stimulus object is disposed in a visual lower half area.

4. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 2, wherein the visual stimulus object is disposed in a visual

lower half area.

5. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein measuring the evoked activity includes measuring an evoked potential of an N130 component that is opposite in peak extreme value to a P100 component immediately after the P100 component is evoked by visually stimulating a primary visual cortex of the subject.

6. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to any one of claim 2 to claim 5, wherein the visual stimulus object consists of a combination of line segments.

7. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 6, wherein the visual stimulus object consists of at least two kinds of visual stimulus objects that are equal to each other in total length of the line segments of which each visual stimulus object is formed, and the at least two kinds of visual stimulus objects are alternately presented to the subject.

8. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to any one of claim 2 to claim 5, wherein the visual stimulus object is not presented within a visual angle of 8 degrees from the fixation point to which attention of the subject is paid, excluding the fixation point.

9. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to any one of claim 2 to claim 5, wherein the visual stimulus is a contrast, and the evoked activity of the brain's visual cortex evoked by this contrast is evaluated.

10. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 9, wherein the visual stimulus object consists of a combination of chromatic colors.

11. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein the evoked activity is measured using a magnetoencephalography, and the evaluation index is based on a value of a visual evoked magnetic field.

12. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein the evoked activity is measured using an electroencephalograph, and the evaluation index is based on a value of a visual evoked electric potential.

13. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein the spectacle lens to be evaluated is an aspherical lens in which a shape of a peripheral lens part is changed little by little.

14. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein the spectacle lens to be evaluated is a progressive power lens in which a lens shape is changed little by little.

15. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 1, wherein the spectacle lens to be evaluated is a lens whose spectral transmittance is changed by optical absorption or optical reflection.

16. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to any one of claim 1 to claim 5, further comprising designing spectacle lenses using the evaluation index.

17. The method for evaluating spectacle lenses by an evoked activity of a brain's visual cortex according to claim 16, wherein the lens used to determine the evaluation index for designing the spectacle lenses is an aspherical lens, a progressive power lens, or a lens whose spectral transmittance is changed by optical absorption or optical reflection.

18. A method for evaluating a plurality of spectacle lenses by an evoked activity of a visual cortex of a subject's brain, the method comprising:

for each lens of the plurality of lenses to be evaluated, presenting the subject with a visual stimulus object for observation at a peripheral part away from a fixation point to which attention of the subject is paid while the subject is wearing the lens, wherein the visual stimulus object evokes an activity of a specific part of the brain's visual cortex;

measuring, for each lens to be evaluated, the evoked

activity of the specific part of the brain's visual cortex as a change in at least one of an electric potential or a magnetic field of the brain's visual cortex when the visual stimulus object is visually observed by the subject through the lens, wherein the evoked activity is measured using an electroencephalograph, a magnetoencephalograph, or a combination thereof;

determining, for each lens to be evaluated, an evaluation index based on the measured evoked activity, wherein the evaluation index includes a magnitude of the change and a latency in response of the visual cortex to the visual stimulus object;

evaluating the performance of each lens relative to the subject based on the corresponding evaluation index; and

selecting the lens corresponding to the evaluation index having the greatest magnitude of change, the shortest latency in response, or both the greatest amplitude or magnitude of change and the shortest latency in response.

19. The method of claim 18, wherein the evaluation index of the selected lens has the largest magnitude of change in the electric potential or magnetic field of the brain's visual cortex.

20. The method of claim 18, wherein the evaluation index of the selected lens has the shortest latency in response of the brain's visual cortex to the visual stimulus.