[0009] Thus, there exists a need for a more convenient, less costly, more accurate way for patients to determine and receive glasses and contacts prescriptions.

SUMMARY

[0010] In one aspect, there is provided a method for determining a corrective lenses prescription for a patient comprising, separately, for each eye of the patient:

determining an astigmatism prescription for the patient via a computerized screen and without the use of a refractor lens assembly,

wherein determining the astigmatism prescription for the patient comprises testing for a cylinder component by sequentially presenting at least two cylinder diagrams to the patient via the computerized screen and enabling the patient to select at least one input per cylinder diagram,

wherein the at least one input per cylinder diagram corresponds to a cylinder measurement used to determine the corrective lenses prescription for the patient.

[0010a] In another aspect there is provided a method for determining a corrective lenses prescription for a patient comprising, separately, for each eye of the patient:

(a) determining an astigmatism prescription for the patient via a computerized screen and without the use of a refractor lens assembly,

wherein determining the astigmatism prescription for the patient comprises testing for a cylinder component by sequentially presenting at least two cylinder diagrams to the patient via the computerized screen and enabling the patient to select at least one input per cylinder diagram,

wherein the at least one input per cylinder diagram corresponds to a cylinder measurement used to determine the corrective lenses prescription for the patient, and

(b) determining a power of the corrective lenses prescription for the patient via the computerized screen and without the use of a refractor lens assembly.

[0010b] In a further aspect, there is provided a non-transitory computer readable medium including a plurality of instructions, which when executed by at least one processor, cause the at least one processor to operate with at least one display device and at least one input device to determine a corrective lenses prescription for a patient comprising, for each eye of a patient:

(a) determining, without the use of a refractor lens assembly, an astigmatism prescription for the patient by,

(i) presenting a first diagram to the patient via a computerized screen,

(ii) enabling the patient to select an input corresponding to an axis measurement,

(iii) sequentially presenting at least two cylinder diagrams to the patient via the computerized screen, and

(iv) enabling the patient to select at least one input per cylinder diagram, wherein the at least one input per cylinder diagram corresponds to a cylinder measurement used to determine the corrective lenses prescription for the patient;

(b) determining, without the use of a refractor lens assembly, a power prescription for the patient by,

(i) presenting a first figure to a patient via the computerized screen, wherein the first figure is too small to be clearly seen by the patient,

(ii) enabling the patient to make at least one input to increase the size of the first figure until it can just barely be made out by the patient, wherein the at least one input corresponds to a first sphere measurement,

(iii) presenting a second figure to a patient via the computerized screen, wherein the second figure is large enough to be clearly seen by the patient, and

(iv) enabling the patient to make at least one input to decrease the size of the second figure just until it can no longer be made out by the patient, wherein the at least one input corresponds to a second sphere measurement wherein a final sphere measurement is based, at least in part, on the first sphere measurement and the second sphere measurement.

[0010c] The present disclosure relates generally to a system and method for determining the refractive error of a patient, more particularly determining the patient's refractive error by using a computerized screen or other suitable visual tool, and providing the patient with a corrective lenses prescription for the patient's preferred type of corrective lenses. The system and method do not require the trip or expense of a doctor visit, and are optimized for convenience and cost effectiveness.

[0011] In a general embodiment, the present disclosure provides a method for determining a corrective lenses prescription of a patient. The method includes, separately, for each eye of the patient, determining the astigmatism prescription of the patient via a computerized screen.

[0012] In an embodiment, determining the astigmatism prescription of the patient via the computerized screen includes presenting a first diagram to the patient via the computerized screen and enabling the patient to select at least one input. The input corresponds to an axis measurement. The method further includes presenting a second diagram to a patient via the computerized screen

and enabling the patient to select at least one input. The input corresponds to a cylinder measurement.

[0013] In a further embodiment, the first diagram and the second diagram are a same diagram. In an alternative further embodiment, the first diagram and the second diagram are different diagrams.

[0014] In another further embodiment, the first diagram is a rotatable line. In a still further embodiment, the rotatable line is made up of at least two alternating colors. In yet a further embodiment, the at least two alternating colors are selected from the group consisting of the red family and the green family, respectively.

[0015] In an embodiment, the method is provided via an internet.

[0016] In an embodiment, the method includes sending the determined astigmatism prescription to at least one doctor for review and approval.

[0017] In an alternative embodiment, the present disclosure provides a method for determining a corrective lenses prescription of a patient. The method includes, separately, for each eye of the patient, determining the astigmatism prescription of the patient via a computerized screen, and determining the power of the corrective lenses prescription of the patient via the computerized screen.

CLAIMS

The invention is claimed as follows:

1. A method for determining a corrective lenses prescription for a patient comprising, separately, for each eye of the patient:
determining an astigmatism prescription for the patient via a computerized screen.

2. The method according to Claim 1, wherein determining the astigmatism prescription for the patient via the computerized screen comprises:
(i) presenting a first diagram to the patient via the computerized screen,
(ii) enabling the patient to select at least one input corresponding to an axis measurement,
(iii) presenting a second diagram to a patient via the computerized screen, and
(iv) enabling the patient to select at least one input corresponding to a cylinder measurement.

3. The method according to Claim 1, wherein the method is provided via an internet.

4. The method according to Claim 2, wherein the first diagram and the second diagram are different diagrams.

5. The method according to Claim 1, further comprising:
determining a pupillary distance measurement for the patient.

6. The method according to Claim 1, wherein the method further includes sending the determined astigmatism prescriptions to at least one doctor for review and approval.

7. A method for determining a corrective lenses prescription for a patient comprising, separately, for each eye of the patient:
(a) determining an astigmatism prescription for the patient via a computerized screen, and
(b) determining a power of the corrective lenses prescription for the patient via the computerized screen.

8. The method according to Claim 7, further comprising:
determining a pupillary distance measurement for the patient.

9. The method according to Claim 7, wherein determining the astigmatism prescription for the patient via the computerized screen comprises:
(i) presenting a first diagram to the patient via the computerized screen,
(ii) enabling the patient to select an input corresponding to an axis measurement,
(iii) presenting a second diagram to a patient via the computerized screen, and
(iv) enabling the patient to select at least one input corresponding to a cylinder measurement.

10. The method according to Claim 9, wherein the first diagram and the second diagram are different diagrams.

11. The method according to Claim 9, wherein the method further includes sending the determined astigmatism and power prescriptions to at least one doctor for review and approval.

12. The method according to Claim 9, wherein determining the power of the corrective lenses prescription for the patient via the computerized screen comprises:
(i) presenting a first figure to a patient via the computerized screen, wherein the first figure is too small to be clearly seen by the patient,
(ii) enabling the patient to make at least one input to increase the size of the first figure until it can be just barely be made out by the patient, wherein the at least one input corresponds to a first sphere measurement.

13. The method according to Claim 12, wherein determining the power of the corrective lenses prescription for the patient via the computerized screen comprises:
(iii) presenting a second figure to a patient via the computerized screen, wherein the second figure is large enough to be clearly seen by the patient,
(iv) enabling the patient to make at least one input to decrease the size of the second figure just until it can no longer be made out by the patient, wherein the at least one input corresponds to a second sphere measurement.

14. The method according to Claim 13, wherein a final sphere measurement is based, at least in part, on the first sphere measurement and the second sphere measurement.

15. The method according to Claim 9, the method further comprising determining whether the patient is nearsighted or farsighted by presenting colorblocked diagram to the patient via the computerized screen and enabling the patient to select an input corresponding to part of the colorblocked diagram.

16. The method according to Claim 15, wherein the determination is based on a corrected eye and the determination determines whether the patient is over or under corrected.

17. The method according to Claim 9 wherein the computerized screen comprises two or more computerized screens.

18. The method according to Claim 12, wherein at least one of steps (i) and (ii), or steps (iii) and (iv) are repeated at least once.

19. The method according to Claim 9 wherein determining the corrective lenses prescription for the patient is based, in part, on a previous corrective lenses prescription for the patient.

20. A non-transitory computer readable medium including a plurality of instructions, which when executed by at least one processor, cause the at least one processor to operate with at least one display device and at least one input device to determine a corrective lenses prescription for a patient comprising, for each eye of a patient:

(a) determining an astigmatism prescription for the patient by,

(i) presenting a first diagram to the patient via a computerized screen,

(ii) enabling the patient to select an input corresponding to an axis measurement,

(iii) presenting a second diagram to a patient via the computerized screen, and

(iv) enabling the patient to select at least one input corresponding to a cylinder measurement.

(b) determining a power prescription for the patient by,

(i) presenting a first figure to a patient via the computerized screen, wherein the first figure is too small to be clearly seen by the patient,

(ii) enabling the patient to make at least one input to increase the size of the first figure until it can just barely be made out by the patient, wherein the at least one input corresponds to a first sphere measurement,

(iii) presenting a second figure to a patient via the computerized screen, wherein the second figure is large enough to be clearly seen by the patient, and

(iv) enabling the patient to make at least one input to decrease the size of the second figure just until it can no longer be made out by the patient, wherein the at least one input corresponds to a second sphere measurement;

wherein a final sphere measurement is based, at least in part, on the first sphere measurement and the second sphere measurement.

Claims

1. A method for determining a corrective lenses prescription for a patient comprising, separately, for each eye of the patient:
determining an astigmatism prescription for the patient via a computerized screen and without the use of a refractor lens assembly,
wherein determining the astigmatism prescription for the patient comprises testing for a cylinder component by sequentially presenting at least two cylinder diagrams to the patient via the computerized screen and enabling the patient to select at least one input per cylinder diagram,
wherein the at least one input per cylinder diagram corresponds to a cylinder measurement used to determine the corrective lenses prescription for the patient.

2. The method according to Claim 1, wherein determining the astigmatism prescription for the patient via the computerized screen further comprises:
presenting an axis diagram to the patient via the computerized screen, and
enabling the patient to select at least one input corresponding to an axis measurement.

3. The method according to Claim 1, wherein the method is provided via an internet.

4. The method according to Claim 2, wherein at least one cylinder diagram and the axis diagram are the same diagram.

5. The method according to Claim 1, further comprising:
determining a pupillary distance measurement for the patient.

6. The method according to Claim 1, wherein the method further comprises sending the determined astigmatism prescription to at least one doctor for review and approval.

7. A method for determining a corrective lenses prescription for a patient comprising, separately, for each eye of the patient:

(a) determining an astigmatism prescription for the patient via a computerized screen and without the use of a refractor lens assembly,

wherein determining the astigmatism prescription for the patient comprises testing for a cylinder component by sequentially presenting at least two cylinder diagrams to the patient via the computerized screen and enabling the patient to select at least one input per cylinder diagram,

wherein the at least one input per cylinder diagram corresponds to a cylinder measurement used to determine the corrective lenses prescription for the patient, and

(b) determining a power of the corrective lenses prescription for the patient via the computerized screen and without the use of a refractor lens assembly.

8. The method according to Claim 7, further comprising:
determining a pupillary distance measurement for the patient.

9. The method according to Claim 7, wherein determining the astigmatism prescription for the patient via the computerized screen further comprises:
presenting an axis diagram to the patient via the computerized screen, and
enabling the patient to select an input corresponding to an axis measurement.

10. The method according to Claim 9, wherein at least one cylinder diagram and the axis diagram are the same diagram.

11. The method according to Claim 9, wherein the method further comprises sending at least one of the determined astigmatism and the determined power prescription to at least one doctor for review and approval.

12. The method according to Claim 9, wherein determining the power of the corrective lenses prescription for the patient via the computerized screen comprises:

(i) presenting a first figure to a patient via the computerized screen, wherein the first figure is too small to be clearly seen by the patient, and

(ii) enabling the patient to make at least one input to increase the size of the first figure until it can be just barely be made out by the patient, wherein the at least one input corresponds to a first sphere measurement.

13. The method according to Claim 12, wherein determining the power of the corrective lenses prescription for the patient via the computerized screen comprises:

(iii) presenting a second figure to a patient via the computerized screen, wherein the second figure is large enough to be clearly seen by the patient, and

(iv) enabling the patient to make at least one input to decrease the size of the second figure just until it can no longer be made out by the patient, wherein the at least one input corresponds to a second sphere measurement.

14. The method according to Claim 13, wherein a final sphere measurement is based, at least in part, on the first sphere measurement and the second sphere measurement.

15. The method according to Claim 9, the method further comprising determining whether the patient is nearsighted or farsighted by presenting colorblocked diagram to the patient via the computerized screen and enabling the patient to select an input corresponding to part of the colorblocked diagram.

16. The method according to Claim 15, wherein the determination is based on a corrected eye and the determination determines whether the patient is over or under corrected.

17. The method according to Claim 9, wherein the computerized screen comprises two or more computerized screens.

18. The method according to Claim 13, wherein at least one of steps (i) and (ii), or steps (iii) and (iv) are repeated at least once.

19. The method according to Claim 9, wherein determining the corrective lenses prescription for the patient is based, in part, on a previous corrective lenses prescription for the patient.

20. A non-transitory computer readable medium including a plurality of instructions, which when executed by at least one processor, cause the at least one processor to operate with at least one display device and at least one input device to determine a corrective lenses prescription for a patient comprising, for each eye of a patient:

(a) determining, without the use of a refractor lens assembly, an astigmatism prescription for the patient by,

(i) presenting a first diagram to the patient via a computerized screen,

(ii) enabling the patient to select an input corresponding to an axis measurement,

(iii) sequentially presenting at least two cylinder diagrams to the patient via the computerized screen, and

(iv) enabling the patient to select at least one input per cylinder diagram, wherein the at least one input per cylinder diagram corresponds to a cylinder measurement used to determine the corrective lenses prescription for the patient;

(b) determining, without the use of a refractor lens assembly, a power prescription for the patient by,

(i) presenting a first figure to a patient via the computerized screen, wherein the first figure is too small to be clearly seen by the patient,

(ii) enabling the patient to make at least one input to increase the size of the first figure until it can just barely be made out by the patient, wherein the at least one input corresponds to a first sphere measurement,

(iii) presenting a second figure to a patient via the computerized screen, wherein the second figure is large enough to be clearly seen by the patient, and

(iv) enabling the patient to make at least one input to decrease the size of the second figure just until it can no longer be made out by the patient, wherein the at least one input corresponds to a second sphere measurement;

wherein a final sphere measurement is based, at least in part, on the first sphere measurement and the second sphere measurement.