EYEGLASSES FOR RETARDING THE PROGRESSION OF MYOPIAGLASSES FOR RETARDING MYOPIA PROGRESSION

[TECHNICAL FIELD]

[0001] The present invention relates to a pair of eyeglassesglasses, particularly glasses for retarding the myopia progression of myopia.

[BACKGROUND ART]

[0002] Myopia is defined as when the ciliary muscle within the eye responsible for focus accommodationfocusing accommodation is at its highest most physical relaxation level and light from distant objects is are focused in front of the center of the retina. The blurry vision image of distant objects not only causes visual impairment but may also lead to serious complications such as glaucoma, retinal detachment and macular degeneration, thereby causing the consequence of blindness. The more progressed myopia, the more likely the development of blindness. Myopia is caused by too much reading or too short distance kept in reading, which leads to accommodative the spasm of the focusing accommodation and continuous contraction of the extraocular importers intortor, thereby causing and thus to cause the excessive axial elongation of the axis of eyeball (causing true myopia and rapid growth in myopic degrees). Reading control is thus crucial for preventing the onset generation and progression of myopia.

[0003] In the reading process, the ciliary muscle of the eye contracts and to change the shape of the crystalline lens, so as to achieve the eye focus (accommodation), while whereas the extraocular intortors contract intortor contracts (primarily by the intortor intortors and secondarily by

superior and inferior rectus muscles) to obtain the binocular single ~~vision~~ image.

[0004] ~~Developments~~ Progression in the degree of myopia ~~are~~ is essentially caused by elongation of the axial ~~elongation~~ length of eyeball. Inhibiting ~~axial~~ elongation of the axial length of eyeball can thus prevent ~~developments~~ progression in the degree of myopia. Among existing technologies, ~~applying~~the myopic defocus applied on peripheral retina can ~~to~~ inhibit ~~axial~~ the elongation ~~can retard~~of the axis of eyeball, ~~to~~ thereby in some extent, retarding the progression of ~~developments in~~ the degree of myopia.

[0005] When a patient ~~wearing~~ wears myopia glasses (to correct distant ~~vision~~eyesight) to read~~reads~~, the spasm of focusing accommodation of the ~~by~~ intraocular ciliary muscle~~s~~ and the contraction of the extraocular intortor~~s~~ are constantly at work, ~~which causes~~ causing tremendous pressure on eyeballs. Such a tremendous pressure can cause the spasm of the focusing accommodation, ~~accommodative spasms~~ and excessive ~~axial~~ elongation of the axis of eyeball due to ~~caused by eye~~ stretch resulting from the contraction of the extraocular intortor~~s~~, thereby causing or worsening myopia. If the situation is not effectively inhibited, myopia can continue to be worsen~~ed~~.

[0006] Generally, typical patients who wear eyeglasses ~~in reading~~ can undoubtedly take off their glasses ~~given~~ to read because the reading ~~materials are~~matter is close to their eyes in reading. However, ~~doing so involves~~ if the ~~following~~ patients do so, the inconveniences and drawbacks are as follows:

[0007] (a) When astigmatism (~~a~~ common ~~eye condition~~) ~~happens along with myopia~~is present, the absence of glass lenses means a lack of correction over the refractive error ~~caused by astigmatism~~, thereby leading to blurred ~~vision~~ image.

[0008] ~~—~~ (b) With a high degree of myopia, for example, over 400 degrees, he must bend forward ~~in reading~~, thereby causing ~~exhaustion~~ the back strain and a strong sense of discomfort. A short reading distance also ~~causes a tremendous pressure for extraocular intortors, and in~~ strains of the ~~meantime~~ extraocular intortor. Meanwhile, the physiological mechanism of ~~triple dynamics~~ pupillary accommodation reflex also causes increased accommodation, thus leading to ~~worsened~~ increase myopia.

[0009] (c) In case ~~of a high~~where the degree of myopia is not too high, even though the reading distance is not as short as that of (a), the reader cannot enjoy the ~~inhibitory~~ effect of ~~this invention on~~ retarding the progression of myopia ~~since the glasses are~~ if glasses of this disclosure were not worn.

[0010] (d) When a ~~patient with~~ myopia patient wants to see distant objects, he needs to wear glasses, which prompts his eyes to readjust the focusing accommodation and the work of extraocular intortor~~s~~. When he wants to see nearby objects, he has to take off the glasses and then readjust the focusing accommodation and the work of extraocular intortor~~s~~ to adapt. The repeated ~~putting on~~wearing, ~~removing~~ taking off and ~~readjustment~~ reaccommodation practices are definitely inconvenient and more likely to cause eyestrain.

[0011] (e) When one ~~uses~~ reads electronic ~~products~~ screens (e.g., PCs

and mobile phones), or uses LEDs screen emitting blue lights, or works under sunlight without wearing blue light-blocking light protective glasses, the excessive harmful blue lights are left unblocked light is not blocked and thus can harm ocular eyes and physiological health over time.

[0012] Additionally, myopic correction methods that do not have an inhibitory a retarding effect on the progression of myopia include as follows:.

[0013] First, the simple myopic correction lens is used to correct, which does not have a true inhibitory retarding effect on the progression of myopia and instead intends thus to cause increased increasing myopic degree.

[0014] Second, orthokeratology laser procedure does not inhibit retard the progression of myopia, and but can cause glare, corneal xerosis xerophthalmia and infection. Further, a rebound of myopic degree a number of few years after the procedure, thus increasing the surgery is common. The risk of retinal breaks and detachment is also increased.

[0015] Third, alternation of two sets of glasses is adopted, with one set for seeing distant objects and the other for close onesnearby objects. Specifically, glasses helping wearers see close for seeing nearby objects reduce ocular the eye's focusing accommodation and slow down the progression of myopia. The drawbacks thereof include inconvenience, high costs and low compliance, as well as poor reading adaptability to reading when of glasses, with overlapped are fitted with prism lenses for close visionseeing nearby objects.

[0016] Fourth, a part of bifocal ~~lenses. The close vision part~~ lens which sees nearby objects is used to relax the focusing accommodation ~~for close vision~~ to prevent progression of myopia~~,~~. However, ~~with~~ the bifocal lenses have the shortcomings of low acceptability of their appearance, inconvenience when being used to view desktop computers, and poor adaptability ~~to~~ of the bifocal lenses when being worn during sports or when overlapped with the ~~close vision part is fitted with~~ prism lenses for nearby objects.

[0017] Fifth, peripheral defocus lenses. When a myopia patient ~~with myopia~~ wears ~~regular~~ common prescription glasses, only ~~objects~~ middle scenes in ~~the center of~~ the ~~distant vision~~ instant line-of-sight distance are focused on the central retina, while the peripheral ~~objects~~ scenes are actually focused behind the retina (hyperopic defocus phenomenon). The myopic degrees on both sides of a peripheral defocus lens are smaller than that of the central part thereof. Thus, when such lenses are worn, the ~~peripheral vision~~ surrounding scenes will be focused in front of the ~~nearby~~ peripheral retina, thereby offsetting the eye's congenital defect of peripheral defocus ~~and thus preventing~~ in the case of far sight. Thus, excessive elongation of the axial ~~elongation~~ length of eyeball is prevented and ~~inhibiting~~ the progression of myopia is retarded. The shortcoming is ~~a failure to control~~ that the reading process is not controlled and ~~an insignificant~~ a retarding effect on ~~preventing~~ the progression of myopia is not significant.

[0018] Sixth, a part of progressive ~~lenses. The close vision part relaxes accommodation~~ lens which sees nearby objects is used to relax

the focusing accommodation, so as to prevent ~~progression in~~ myopia progression. The drawback is that young myopic patients may ~~erroneously find~~ not find and use the most appropriate part of the lenses for seeing the ~~close vision part~~nearby objects, ~~leading to an adverse effect on~~ thereby influencing the ~~efficacy~~ effects. Optical distortion on lens edges can cause discomfort, and ~~there is an inability to separately overlay prisms on~~ thus the ~~close vision~~ part for seeing nearby objects cannot be separately overlapped with prism lenses.

[0019] Seventh, a drug is applied to paralyze the ciliary muscle ~~in the combination of~~ and the bifocal lens or progressive lens is worn. The wearer's pupil is dilated by the drug and the focusing accommodation ability is decreased, thus the focusing accommodation ability of the bifocal lenses or the progressive lenses ~~are used to offset the lack of or decrease in accommodation~~is deficient and decreased, ~~thus~~ thereby helping reduce myopia progression ~~in myopia~~. The drawbacks ~~include susceptibility to~~ thereof are glare, ~~cardioacceleration~~rapid heartbeat, fever, ~~and~~ dry eyes and dry mouth; and long-term use may result in the entry of harmful ultraviolet light into the eyeballs, thereby leading to retinal and macular degeneration. A lower concentration of atropine ~~used to paralyze~~ for paralyzing the ciliary muscle still has toxicity. The toxicity of the latest ultra-low concentration (0.01%) of atropine remains to be seen, ~~but~~ whereas its treatment efficacy is ~~less than~~ unsatisfactory.

[0020] Eighth, orthokeratology ~~lenses. Orthokeratology~~ lenses that are worn at night can somewhat flatten the myopic patient's cornea curvature, ~~thus fulfilling the efficacy of~~ for correcting myopia and

preventing its reducing myopia progression. Given Due to its invasiveness, the approach results in high susceptibility corneal surface is easy to corneal damage be broken, ulceration and infected, and frequency occurrence of keratoconus can happen as well.

[0021] To sum up, traditional myopia correction methods have many drawbacks and are not reliable or safe enough to use. With a growing myopic population, it is increasingly pressing to find a more convenient and safer approach to the problem.

[DISCLOSURE OF INVENTION**SUMMARY**]

[0022] It should be understood that the foregoing general descriptions and ensuing detailed descriptions of this disclosure are exemplary and explanatory, and committed intended to providing further explanations for this disclosure as mentioned in the Claimsclaims.

[0023] To overcome the above problems, the present invention disclosure provides glasses for retarding the progression in myopia progression, comprising which includes a frame and temples glasses legs, wherein and characterized in that each of said temples the glasses legs comprises of the a first leg and a second temples leg, said the second leg temple being is connected between the said frame and said the first templeleg, said the second temple leg is movable moving telescopically in relation to said the first legtemple, allowing said frame in movement of the frame relative relation to eyeballs to move from a primary position to a post-elongation secondary position stretched., The a relationship between the an effective degree and a lens degree is denoted byas follows:

$$P_2 = P_1/(1-d_2P_1)$$

[0024] ~~where~~ Wherein ~~Pi~~ P_1 is ~~the~~ an actual lens degree at ~~said~~ the primary position, P_2 is ~~the~~ an effective lens degree at ~~said~~ the secondary position and d_2 is ~~the~~ a spacing between ~~said~~ the primary position and the secondary position, the spacing meets ~~which satisfy~~:

$$0<d_2<60mm$$

[0025] ~~Preferably~~In some embodiments, the present ~~invention~~ disclosure further provides glasses for retarding myopia progression ~~of myopia, characterized in that~~.

[0026] ~~said the~~ The first ~~temple~~ leg may include ~~comprises~~ a plughole arranged at ~~its~~ a front end of the first leg, ~~said~~ the second leg ~~temple being~~ may be telescopically ~~and~~ arranged at ~~the~~ a first end of the ~~said~~ plughole.

[0027] ~~**Preferably**~~ In some embodiments, the present ~~invention~~ disclosure further provides glasses for retarding myopia progression ~~of myopia, characterized in that~~.

[0028] ~~said~~ The glasses further ~~comprise~~ may include a movable body, ~~said~~ the movable body ~~being~~ may be embedded at ~~the~~ a second end of the ~~said~~ plughole.~~, said~~ The second leg ~~temple being~~ may be arranged within ~~said~~ the plughole and connected to ~~said~~ the movable body.

[0029] ~~**Preferably**~~ In some embodiments, the present ~~invention~~ disclosure further provides glasses for retarding myopia progression ~~of myopia, characterized in that~~.

[0030] ~~a~~ A plurality ~~number~~ of ~~parallel~~ grooves may be ~~are~~ formed longitudinally and parallelly in ~~cut along the vertical direction of~~ the

said plughole,. Aa plurality number of first parallel ribs may be formed longitudinally in an insertion being cut along the vertical direction at the plugging head end of the said movable body,. Each of the first said ribs and a corresponding one of the said grooves being may be engaged with each otherclamped.

[0031] PreferablyIn some embodiments, the present invention disclosure further provides glasses for retarding myopia progression of myopia, characterized in that.

[0032] the plugging An insertion tail end of the said movable body is may be provided arranged with a number plurality of concave-convex stripes and a an convex horizontal bar shaped operating portion of which a shape may be a convex and transversal stripe.

[0033]Preferably In some embodiments, the present invention disclosure further provides glasses for retarding myopia progression of myopia, characterized in that.

[0034] the said The movable body comprises may include intermeshed rack and pinion, an adjustment accommodation knob arranged on the a side face of said the first leg temple may be capable of rotating to drive the rotation of said pinion to rotate, such that the allowing said rack of the said movable body may be moved to move and telescopically adjust the a relative spacing between the said first leg and the second temples leg may be telescopically adjusted.

[0035]Preferably In some embodiments, the present invention disclosure further provides glasses for retarding myopia progression of myopia, characterized in that.

[0036] the said The plughole further comprises may include a spring, a telescopic body, a turntable, a push rod and a chute,. The said telescopic body being joined together may be connected with said the second leg temple as a whole, with its a width of at the telescopic body tail may be larger than a width of the an opening of the said plughole,. said The spring housing being arranged may be sleeved on said the telescopic body, an end of the said telescopic body being arranged may be sleeved with said the turntable. An outer circumferential surface of the turntable may be provided at its end, said turntable being arranged with a number plurality of parallel second ribs along the a central axis of the outer circumferenceturntable,. the A first end of said the push rod being sheathed may be sleeved within said the chute and protruding out of the an opening of the said the chute, the a second end of said the push rod may abut being propped against said the turntable,. said The chute being may be arranged with a number plurality of one-way open and parallel chute openingsslots,. A head of said the push rod may be provided being arranged with a number plurality of spiky pointy protrusions at its head, and the opposing face between the said turntable and said chute is arranged with a concave-convex meshing mechanism structure may be provided on opposite surfaces of both the chute and the turntable;.

wherein, byBy pressing the pushing said push rod protruding out of the an end of the said plughole, said the push rod moves along the said chute to press force the said turntable to move downward. When said the turntable and said the chute may be detached at the a meshing position, the spiky pointy protrusions at the head of said the push rod

contact with the an oblique plane of said the turntable

[0037] to generate, generating a radial force, so as to drive said the turntable to rotate,. making said The telescopic body propped abutting against one end of the said turntable to may be compressed, said the spring outside the turntable being may be in a compressed state, said the frame being is in said the primary position. When said the push rod is may be pressed again, the spiky pointy protrusions of the head of said the push rod detach may be detached from the oblique plane of the said the turntable,. said The turntable rotating may rotate under the radial force, the turntable and the chute may be overlapped said turntable overlapping at the meshing position. location of said chute. WithAlong with a the stretching of said the spring, said the frame may reach arrives at said the secondary position.

[0038]~~**Preferably**~~ In some embodiments, the present ~~invention~~disclosure further provides glasses for retarding myopia progression ~~of myopia, characterized in that.~~

[0039] ~~a number~~ A plurality of ~~grooves are cut~~ recesses may be formed at outer side edges ~~flanks~~ of both a ~~said~~ left lens and a right ~~lenses~~ lens, ~~said grooves having~~ a range of a ~~their~~ depth d of each of the recesses may be~~take values within the range~~:

$$70\text{mm} < d < 100\text{mm}.$$

[0040]~~**Preferably**~~ In some embodiments, the present ~~invention~~ disclosure further provides glasses for retarding myopia progression ~~of myopia, characterized in that.~~

[0041] ~~said~~ The recesses ~~grooves~~ may be formed ~~are cut~~ along ~~the~~ a central horizontal baseline of both the left lens and the right lens on the outer side edges ~~flanks~~ of ~~said~~ the left lens and the right ~~lenses~~lens.

[0042] ~~**Preferably**~~ In some embodiments, the present ~~invention~~ disclosure further provides glasses for retarding myopia progression ~~of myopia, characterized in that~~.

[0043] A cross-sectional shape~~s~~ of ~~said~~ the plughole may include rectangle, circle and ellipse.

[0044] By adopting the ~~The present invention of~~ glasses for retarding ~~progression of~~ myopia progression in the embodiment, through the ~~employs a convenient~~ telescopic manner, ~~design to fulfill~~ comfortable and safe ~~adjustment~~ accommodation of the ~~of myopic~~ degree~~s~~ of myopia is achieved by ~~on~~ a pair of glasses, and the use of the glasses is simple~~, offering ease-to-use~~ and the cost thereof is low~~low-cost advantages~~.

~~[~~BRIEF DESCRIPTION OF THE DRAWING~~]~~

[0045] Hereinafter, exemplary embodiments of the present disclosure will be described in detail with reference to the accompanying drawings. Hereinafter, ~~describe each illustrative~~ preferred embodiments of the present disclosure will be referred in detail, examples of which are illustrated in ~~with reference to~~ the accompanying drawings~~,~~. ~~wherein the embodiments are presented in the accompanying drawings.~~ Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or similar parts. In addition, although the terms used in this disclosure are selected from publicly known and used

terminologies, some terms mentioned in the public disclosure may have been selected by the applicant based on his or her discretion, the detailed definitions of which are explained in other descriptive parts of this text. Further, it is required that the present disclosure be understood not only by terms actually used but by the meaning implied by each term.

[0046] Numerous ~~objects~~ purposes, features and advantages of the present ~~invention~~ disclosure will be readily apparent to those of ordinary skill in the art upon a reading of the following detailed description of the present ~~invention~~disclosure.

[0047] FIG. 1 is a schematic ~~the~~ working principle diagram of the special glasses according to ~~of~~ the present ~~invention~~ disclosure;

[0048] FIG. 2 shows ~~is~~ a specific embodiment based on the working principle shown in FIG. 1;

[0049] FIG. 3 is a schematic ~~the~~ diagram of binocular observation when the special glasses of the present ~~invention~~ disclosure are used;

[0050] FIG. 4 is a partial schematic structural ~~the local structure~~ diagram in a ~~of the~~ first preferred embodiment of the present ~~invention~~ disclosure;

[0051] FIG. 5 is ~~the~~ a cross-section view taken along line ~~of the structure of~~ A - A' ~~shown~~ in FIG. 4;

[0052] FIG. 6 is a~~the~~ side view of the first preferred embodiment shown in FIG. 4 at ~~the~~ a primary position;

[0053] FIG. 7 is ~~the~~ a side view of the first preferred embodiment shown in FIG. 4 at ~~the~~ a secondary position;

[0054] FIG. 8 is a partial schematic structural ~~the local structure~~ diagram of ~~the~~ a second preferred embodiment of the present ~~invention~~ disclosure;

[0055] FIG. 9 is ~~the~~ a cross-section view taken along line ~~of the structure of~~ B-B' ~~shown~~ in FIG. 8;

[0056] FIG. 10 is a partial exploded ~~the local structure decomposition~~ diagram of ~~the~~ a third preferred embodiment of the present ~~invention~~disclosure;

[0057] FIG. 11 is ~~the~~ an exploded cross-section view taken along line ~~decomposition diagram of~~ C-C' ~~shown~~ in FIG. 10;

[0058] FIG. 12 is a schematic ~~the improved~~ structural diagram of improvement on lenses according to ~~of~~ the present ~~invention~~disclosure.

[0059] ~~Drawing reference signs~~List of the reference characters:

10 - ~~Anterior~~ front frame

11 - Hinge

12 - Plughole

13 ~~–~~ First rib~~Rib~~

14 - Groove

15 - Concave-convex stripe~~s~~

16 - Operating portion

17 - ~~Temple~~Glass handle

18 - Movable ~~Body~~ body

19 - First ~~temple~~ leg

20 - ~~Temple tip~~ ear pad

21 - Second ~~temple~~ leg

22 - Nose Pad

301 - Right lens

302 - Left lens

81 - ~~Adjustment~~ Accommodation knob

82 - Rack

83 - Pinion

90 - Spring

91 - Telescopic body

92 - Turntable

93 - Push rod

94 - Chute

921 - Second rib~~Rib~~

941 - Opening

942 - Chute notch

100 - First eyeball~~Eyeball~~

200 - Eyeball

~~[SPECIFIC EMBODIMENTS]~~DETAILED DESCRIPTION OF THE EMBODIMENTS

[0060] This ~~specification~~ description discloses one or more embodiments incorporating the features of the present ~~invention~~ disclosure. The disclosed embodiments only exemplify the present ~~invention~~disclosure. The scope of the present ~~invention~~ disclosure is not

limited to the disclosed embodiments. The present ~~invention~~ disclosure is defined by the attached ~~Claims~~ claims.

[0061] References in the ~~specification~~ description to "one embodiment," "an embodiment," "an exemplary embodiment," etc. indicate that the described embodiment may include a particular feature, structure, or characteristic, but not all embodiments necessarily include the particular feature, structure, or characteristic, structure or properties. In addition, these terms may not necessarily refer to the same embodiments. Further, when a particular feature, mechanism or characteristic is described in connection with one embodiment, it is considered within the knowledge of those skilled in the art to implement such feature, structure or characteristic in connection with other embodiments, whether explicitly described or not.

[0062] Additionally, it should be understood the spatial descriptions (e.g., above, below, on top of, left, right, beneath, top, bottom, vertical, horizontal, etc.) used herein are only for descriptive purposes, and the actual structural implementation method described herein can be spatially arranged in any orientation or manner.

[0063] FIG. 1 is a schematic diagram of ~~the~~ working principle ~~diagram~~ of the present ~~invention~~ disclosure, indicating how the back-and-forth movement of a~~the~~ ~~anterior~~ front frame 10 of myopic lens improves the degree of myopic degree.

[0064] ~~Wherein the~~The reference signs in the diagram have the following meanings:

C~~:~~ denotes a ~~Central~~ central corneal surface;

d_1~~:~~ denotes a distance from C to P_1 at ~~the~~ a primary position;

d_2~~:~~ denotes a ~~the~~ distance of P_1 at the primary position and P_2 at the secondary position, and d_2 = 6cm

~~0~~O~~:~~ denotes ~~Book~~ book reading;

~~01'~~O_1'~~:~~ denotes ~~Book~~ book vision seen by eyes when the lenses are in the primary position;

~~02'~~O_2'~~:~~ denotes ~~Book~~ book vision seen by eyes when the lenses are in the secondary position;

P_1~~:~~ denotes ~~Lenses~~ lenses at the primary position;

P_2~~:~~ denotes ~~Lenses~~ lenses at the secondary position;

R_1~~:~~ denotes ~~Light~~ light that has traveled through P_1;

R_2~~:~~ denotes ~~Light~~ light that has traveled through P_2; and

100~~:~~ denotes a first ~~Eyeball~~ eyeball;

[0065] As can be seen from the embodiment shown in ~~of~~ FIG. 1, when the first leg 19 and second ~~temples~~ leg 21 of the myopia glasses~~, namely 19 and 21~~, relatively move from each other, the primary position P_1 and secondary position P_2 of lenses in relation to the cornea are generated.

[0066] The ~~relationship between the~~ spacing between the primary position and the secondary position, ~~of the two positions~~ and the implementable ~~adjustment~~ accommodation of myopic degree have the following relationship. ~~is further described as follows, that~~ That is, the following explains in detail the effect of the adjustable glasses of the present ~~invention~~ disclosure in use process:

[0067] First, the parameters applied are explained as follows:

[0068] f_1 = focal length of lens (unit: meter).

[0069] f_2 = effective focal length of lens (unit: meter).

[0070] ~~The v~~Vertex distance ~~(vertex distance)~~ = distance between the backside of the lens and the central corneal surface.

[0071] d_2 = change in vertex distance (only denotes differences without considering direction, which means it always has a positive value).

[0072] Unit of d_2: meter.

[0073] ~~-~~P_1 = ~~unit of the~~ degree of lens [myopia lens is denoted by a minus sign (-)], unit: D (Diopter).

[0074] P_2 = ~~Unit of the~~ effective degree of lens [myopia lens is denoted by a minus sign (-)], unit: D (Diopter).

[0075] Reading distance is L (meter), and ~~adjustment~~ accommodation coefficient is a, which satisfy:

$$1 > a > 0$$

[0076] ~~**wherein**~~ Where, the relationship between the above parameters is defined by the following equation~~:~~.

[0077] The effective focal length of lens is denoted by the equation:

[0078] $f_2 = f_1 - d_2$ (1)

[0079] The effective focal length of lens is denoted by the equation~~focal distance~~:

[0080] $f_2 = 1/P_2 = 1/P_1 - d_2$ (2)

[0081] Where, the effective focal length of lens is denoted by the equation:

[0082] $1/P_2=(1-d_2P_1)/P_1$ (3)

[0083] Then, the effective focal length of lens is denoted by the equation:

[0084] $P_2 = P_1 / (1-d_2P_1)$ (4)

[0085] Where d_2 = denotes a forward movement distance from central corneal surface, which is of positive value; thus $1- d_2P_1$ is also positive value;

[0086] d_2 = aL denotes a distance the reduction in the number of degrees needed to be adjusted due to the forward movement of the lens from the central corneal surface,

[0087] ~~where~~ Where, d_2 is denoted by the equation:

[0088] $60mm > d_2 > 0mm$ (5)

[0089] The embodiment incorporating the above relationships has the following relationship~~is as follows~~:

[0090] If the -5 D lens moves from the primary position P_1 forward by 60mm to the secondary position P_2,

[0091] based on Equation (4), the effective lens degree is denoted by the equation:

$$p_2 = \frac{p_1}{1 - d_2 p_1}$$

$$= \frac{-5}{1 - [0.06 \times (-5)]}$$

$$= \frac{-5}{1.3} = -3.85 \text{ D}$$

[0092] As such, the glasses of the present ~~invention~~ embodiment change the effective lens degree through ~~adjustment~~ lens forward movement. When the ~~anterior~~ front frame 10 ~~attached with~~ of the myopia lens moves forward by 60mm, the myopia degree is adjusted from the -5D at the primary position to -3.85D, thus resulting in a decrease in degrees by +1.15D.

[0093] FIG. 2 shows that both eyes do not need to look relatively much downward to read and observe objects when the lenses are in the secondary position (in relation to the primary position) without considering ~~adjustment~~accommodation. That is because the vision at the lower end is lifted, reducing the workload of extraocular muscles. Because the more straight the eyes look forward, the more balanced the tension of each extraocular muscle.

[0094] FIG. 2 further illustrates that after the ~~anterior~~ front frame and myopia lens move forward, the light on the book will be affected by the lenses that have moved forward, producing a base-down prism effect and causing the book to seem to have moved a little upward, thereby effectively reducing the necessity of downward-looking or head lowering.

[0095] ~~Wherein, the~~The reference signs in FIG. 2 have the following meanings~~:~~.

C~~:~~ denotes a ~~Central~~ central corneal plane;

d_1~~:~~ denotes a ~~Distance~~ distance from C to P_1 at the primary position;

d_2~~:~~ denotes a ~~Distance~~ distance from P_1 at the primary position to P_2 at the secondary position;

~~0: Book reading~~

~~0_1'~~O_1'~~:~~ denotes ~~The~~ the vision in book reading seen by eyes when the lenses are at the primary position;

~~0_2'~~O_2'~~:~~ denotes ~~The~~ the vision in book reading seen by eyes when the lenses are at the secondary position;

P_1~~:~~ denotes ~~Lenses~~ lenses at the primary position;

P_2~~:~~ denotes ~~Lenses~~ lenses at the secondary position;

R_1~~:~~ denotes ~~Light~~ light that has traveled through primary position P_1;

R_2~~:~~ denotes ~~Light~~ light that has traveled through secondary position P_2;

Z~~:~~ denotes ~~Height~~ height difference; and

100~~:~~ denotes first ~~Eyeball~~eyeball.

[0096] FIG. 3 provides ~~the~~ a top view of the special glasses of the present ~~invention~~ disclosure in use.

[0097] Wherein the first eyeball ~~eyeballs~~ 100 and eyeball 200, the ~~original~~ primary position P_1 and secondary position P_2 of lenses are presented.

[0098] As can be known from the ~~FIG.~~ figure, when the ~~anterior~~ front frame ~~10~~ and myopia lenses are moved forward, light on the book will be affected by the lenses that have moved forward, producing a base-in prism effect. As a result, the user can maintain binocular single vision without having to converge too much of his or her eyes.

[0100] ~~Wherein, the~~The reference signs in FIG. 3 have the following meanings~~:~~.

C~~:~~ denotes a ~~Central~~ central corneal surface;

~~0~~O~~:~~ denotes ~~Reading~~ reading book;

P_1~~:~~ denotes ~~Lenses~~ lenses are in primary position;

P_2~~:~~ denotes ~~Lenses~~ lenses are in the secondary position~~.~~;

R_1~~:~~ denotes light that has traveled through P_1;

R_2~~:~~ denotes ~~Light~~ light that has traveled through P_2~~.~~;

α ~~:~~ denotes ~~The~~ an angle of the outward shift of book vision caused by lenses at the primary position P_1;

β ~~:~~ denotes ~~The~~ an angle of the outward shift of book vision caused by lenses at the secondary position P_2;

100~~:~~ denotes first eyeball~~Eyeball~~; and

200~~:~~ denotes ~~Eyeball~~eyeball.

[0101] First embodiment

[0102] FIG. 4 shows a partial schematic structural ~~presents the local structure~~ diagram of the first embodiment of the present ~~invention~~ disclosure;

[0103] The glasses retarding progression of myopia ~~presented~~provided ~~comprise~~ include different shapes and types including full-rim, semi-rim and rimless ~~anterior~~ front frame 10~~,~~. The ~~said anterior~~ front frame 10 is connected to a movable body 18 through a hinge 11~~,~~. ~~said~~ The movable body 18 ~~being~~ is able to move in relation to ~~the~~ a first end of first ~~temple~~ leg 19~~,~~. ~~said~~ The first ~~temple~~ leg 19 is connected at its second end with ~~the temple tip~~an ear pad 20 via ~~temple~~ a glass handle 17.

[0104] Please refer to FIGs. 4 and 5 which reveal~~s~~ the structures of ~~said~~ the ~~anterior~~ front frame 10 and the movable body 18 in detail.

[0105] ~~Wherein the~~ The first end of the first ~~temple~~ leg 19 is provided with a plughole 12 which has a certain length~~,~~. ~~the~~ The first end of the movable body 18 is connected to the second ~~temple~~ leg 21 which is connected to the hinge 11. The movable body 18 is movably embedded in the plughole 12.

[0106] As can be known from FIG. 5, a ~~number~~ plurality of grooves 14 are ~~created in a~~ formed longitudinally and parallelly in ~~direction within~~ the plughole 12, and a ~~number~~ plurality of first parallel ribs 13 are also ~~created in a~~ formed longitudinally in a direction on the part of the movable body 18 inserted therein. Each of the ~~The~~ first ribs 13 and a corresponding one of the grooves 14 are mutually engaged ~~clamped~~ to adjust the relative spacing between the first ~~temple~~ leg 19 and the second ~~temple~~ leg 21.

[0107] Additionally, to adjust the movable body 18 more conveniently, an operating portion of which a shape is a convex and transversal ~~raised horizontal~~ stripe ~~shaped operating portion~~ 16 is provided at the tail of the second end of the ~~moving~~ movable body 18, and a plurality of concave-convex stripes 15 are provided on ~~the~~ an end face of the second end.

[0108] The ~~moving~~ movable body given in the preferred embodiment shown in the ~~FIG.~~ figure is a cuboid, which is not limited by this structure in practical applications and can also be an ellipsoid, a cylinder and the like.

[0109] The working mode of the first embodiment will be described

below with reference to FIGS. 6 and 7.

[0110] ~~Wherein~~ FIG 6 shows the structure of the movable body 18 at the primary position.

[0111] The four upright and protruding semi-cylindrical bodies 13 parallel to the longitudinal direction of the ~~moving~~ movable body 18 are embedded ~~in the~~ longitudinally and parallelly in the semi-cylindrical grooves 14 inside the plughole 12 to form a tight locking system.

[0112] FIG. 7 shows the structure of movable body 18 at the secondary position.

[0113] When the ~~moving~~ movable body 18 is pushed into the plughole 12 on the first ~~temple~~ leg 19, each of the first ribs 13 on the ~~moving~~ movable body 18 close to the operating portion 16 is pushed into corresponding one of the grooves 14 inside the plughole 12 close to the second ~~temple~~ leg 21 and locked tight.

[0114] The concave-convex stripes 15 and the operating portion 16 on the back of the ~~moving~~ movable body 18 are to help the ~~anterior~~ front frame 10 and the myopia lens to move back and forth~~, and the horizontal strip-shaped~~. The operating portion 16 in a shape of convex-horizontal strip is to prevent the ~~anterior~~ front frame 10 and the myopia lens from sliding forward excessively and coming out from the ~~temples~~ glasses legs on both sides, in addition to facilitating the user to move the ~~anterior~~ front frame and the myopia lens back to the primary position. The first ~~temple~~ leg 19 and the glass handle 17 are connected to form a horizontal line L_3. The horizontal line L_3 forms a right angle with the vertical lines of the upright head and body. The distance between the ~~anterior~~ front

frame 10 and the first ~~temple~~ leg 19 is about 15mm. The first ~~temple~~ leg 19 is 40mm long, 15mm high and 7mm wide.

[0115] Second embodiment

[0116] ~~FIGS~~FIGs. 8 and 9 further illustrate another schematic structural ~~schematic~~ diagram of the movement of the ~~moving~~ movable body 18 relative to the first ~~temple~~ leg 19.

[0117] Structures similar to those of the first embodiment will not be repeated.

[0118] In this embodiment, a pinion and rack movement ~~adjustment~~ accommodation mechanism is used. As shown in FIG~~S~~s. 8 and 9, ~~a~~ the rack 82 is arranged on the ~~moving~~ movable body 18 in the plughole 12 of the first ~~temple~~ leg 19 to mesh with ~~a~~ the pinion 83.~~, and the~~ The pinion 83 is adjusted by an external ~~adjustment~~ accommodation knob 81 to realize the ~~adjustment~~ accommodation of relative positions between the first leg 19 and the second leg~~temples, that is, 19 and~~ 21.

[0119] When in use, the gear 83 is driven to rotate by rotating the ~~adjusting~~ accommodation knob 81, thereby driving the rack 82 to move back and forth. The rack 82 is integrated with the ~~moving~~ movable body 18, driving the continuous movement of the ~~moving~~ movable body 18 relative to the first ~~temple~~ leg 19, thereby fulfilling the relative ~~adjustment~~ accommodation from the primary position to the secondary position.

Third embodiment

[0120] FIG~~S~~s. 10 and 11 show a third schematic structural ~~schematic~~ diagram of the ~~moving~~ movable body 18 moving relative to the first ~~temple~~ leg 19.

[0121] Those similar to the first and second embodiments will not be discussed again.

[0122] This embodiment includes a spring 90, a telescopic body 91, a turntable 92, a push rod 93 and a chute 94, forming a structure similar to that of a ballpoint pen.~~, wherein the~~ The telescopic body 91 is integrally connected with the second ~~temple~~ leg 21 and is arranged within the plughole 12 on the first ~~temple~~ leg 19.~~, and the~~ The width of the end ~~10~~ of the telescopic body 91 is larger than the opening of the plughole 12 to prevent it from being detached from plughole 12. The spring 90 is sleeved on the telescopic body 91.~~,~~ ~~the~~ The end of the telescopic body 91 is sleeved with a turntable 92.~~,~~ ~~the~~ The outer circumferential surface of the turntable 92 is provided with a ~~number~~ plurality of parallel ~~protruding strips~~ second ribs 921 along the central axis of the telescopic body 91.~~,~~ ~~and the~~ A first end of the push rod 93 is sleeved within the grooves 94 and protruding out of the opening 941 of the chute 94.~~,~~ ~~the~~ A second end of the push rod 93 is abutted against the turntable 92, and the chute 94 is provided with a plurality of ~~several parallel~~ one-way open and parallel chute openings 942. More specially, head of the push rod 93 is provided with a ~~number~~ plurality of pointy protrusions, and a concave-convex meshing structure is provided on the opposite surfaces of both the turntable 92 and the chute 94~~ also have a concave-convex meshing mechanism~~.

[0123] When the push rod 93 ~~extending~~ protruding out from ~~the~~ an end of the ~~socket~~plughole 12 on the first ~~temple~~ leg 19 is pushed, the push rod 93 moves along the chute 94 to ~~press~~ force the turntable 92 to move downward.~~, and when~~ When the turntable 92 ~~is disengaged from the engagement of~~ and the chute 94 are detached at a meshing position, the pointy protrusions ~~of~~ at the ~~top rod 93~~ head of ~~contacts~~ the push rod contact with an oblique plane of ~~inclined surface of~~ the turntable 92 to generate radial force to force the turntable 92 to rotate.~~,~~ The telescopic body abutting against one end of the truntable is compressed, and ~~with~~ the spring 90 at its outside the turntable is ~~being~~ in the compressed state. At this point, the lens of the glasses of the present ~~invention~~ embodiment is in the primary position.

[0124] When the push rod 93 is pressed again, the ~~spiky~~ pointy protrusions on the head of the push rod 93 are ~~separated~~ detached from the oblique plane of the turntable 92.~~, which is rotated and~~ The turntable 92 rotates under the radial force and overlaps with the ~~engagement~~ meshing position of the chute 94.~~, and~~ As the spring 90 is stretched,~~. The~~ the lenses of the glasses of the present ~~invention~~ disclosure reach~~es~~ the secondary position.

[0125] For example, if the lens of~~a~~ -10D ~~lens~~ is moved forward by 50mm from the primary position to the secondary position, ~~then~~so, the effective degree of the lens ~~power~~ obtained according to Equation (4) is denoted by the equation:

$$P_2 = P_1/(1-d_2P_1)$$

$$= (-10\ D)/(1-[0.05X\ (-10D)])$$

$= (-10D)/1.5D$

$= -6.67$

[0126] In this way, the final -6.67D obtained is 3.33D less than the previous -10D, which means that ~~represents a +3.33 D decrease in~~ the required degree of focusing accommodation is reduced by +3.33D.

[0127] For another example, if the lens of -8D is moved forward by 40mm from the primary position to the secondary position, the effective degree of the lens ~~power~~ obtained according to Equation (4) is denoted by the equation:

$P_2 = P_1/(1-d_2P_1)$

$= (-8\ D)/(1-[0.04X\ (-8D)])$

$= (-8D)/1.32D$

$= -6.06\ D$

[0128] In this way, the final -6.06D obtained is 1.94D less than the previous -8D, which means that ~~represents a +1.94 D decrease in~~ the required degree of focusing accommodation is reduced by +1.94D.

[0129] For another example, if the lens of -5D is moved forward forward by 60mm from the primary position to the secondary position~~,~~ (as shown in FIG. 1), the effective degree of the lens ~~power~~ obtained according to Equation (4) is denoted by the equation:

$P_2 = P_1/(1-d_2P_1)$

$= (-5D)/(1-[0.06X\ (-5D)])$

= (-5D)/1.3

= -3.85 D

[0130] In this way, the final -3.85D obtained is 1.15D less compared to the previous -5D, which means that the required degree of focusing accommodation is reduced by +1.15D.

[0131] From the above three examples, the glasses designed by applying the improved idea of the present ~~invention~~ embodiment can achieve the technical effect of retarding the progression of myopia, and specifically achieve the following benefits:

[0132] First, only one set of glasses is used, which means the cost is low. ~~It~~ The glasses also has a regular appearance, is easy to use and safe. The same prescription lenses are used, pointing to high adaptability. There is also no optical distortion caused by the use of bifocal and progressive lenses, increasing comfort for wearers.

[0133] Second, the secondary position has a distinct appearance when the glasses are used, which helps parental supervision and improves compliance.

[0134] Third, this method provides the largest field of view without distortion and requires the shortest reading time compared to methods using only one set of fixed eyeglasses.

[0135] Fourth, the pushed-forward prescription myopia lens slightly shrinks the ~~image~~ vision of the book, which visually causes the eye to read the book farther away, thus reducing the need for ~~eye~~ focusing accommodation of the eyes.

[0136] Fifth, when the ~~current~~ front frame and the myopia lens are

moved forward, the user will move the book~~/file~~ document forward to continue reading the full text~~ to continue reading the full text~~. Increasing the reading distance of the document can reduce the pressure of the ciliary muscle inside the eyes for focusing accommodation and help slow down the progression of myopia.

[0137] Sixth, when the user keeps the head and body upright, the ~~anterior~~ front frame and the myopia lens that are pushed out flat, as well as the upper frame edge of the ~~anterior~~ front frame, remain at the original level of the primary position~~,~~. It can ~~which~~ help~~s the~~ user~~s~~ to read more easily through the myopic lenses in the forward and upright front frame with minimal focusing accommodation of the eyes and ~~focus with the smallest eye. The accommodative force and extraocular intortor~~ contraction force of the extraocular intortor ~~are~~ at the same horizontal line of the eyes~~, making it easier to read through the myopic lenses in the forward and upright anterior frame~~.

[0138] Seventh, when both the ~~anterior~~ front frame and the myopia lens are moved forward, the light of the book will be affected by the lens moving forward, causing a base-down prism effect. ~~by which the~~ The book seems to have moved forward a bit, thereby effectively reducing the need for eyes looking down, lowering the head and closer reading distance.

[0139] Eighth, when both the ~~anterior~~ front frame and the myopia lens are moved forward, the light of the book will be affected by the lens moving forward, resulting in a base-inward prism effect. As a result, the user does not have to invert the eyes as much to maintain a binocular single vision. ~~That's because~~ Due to the physiological mechanism of the

pupillary accommodation reflex, ~~triple linkage reduces~~ focusing accommodation pressure is reduced while intortion need on ~~while reducing~~ intortor is reduced ~~pressure~~.

[0140] Ninth, when both the ~~anterior~~ front frame and the myopia lens are moved forward to the secondary position, the light from the book ~~image~~ vision becomes less radiated after passing through the lens, so the user can focus the vision of the book even by using a little less focusing accommodation ~~power~~ demand.

[0141] Tenth, the distance vision at the secondary position when using the present ~~invention~~ embodiment is not unacceptably poor, so there is no need to move the ~~anterior~~ front frame and the lens back to the primary position to see the distance, ~~making it very convenient~~convenience is realized.

[0142] In addition, FIG. 12 also shows the improved structure of the present ~~invention~~ embodiment on the left lens and the right lens~~es~~. It should be noted that this improvement can be applied to the design of rimmed or rimless glasses. The shape of the lens is designed for the desired baseline length so that when reading, peripheral images that do not pass through the lens are focused directly on the peripheral retina~~.~~ (to offset the hyperopic defocus ~~eye's congenital~~ defect of peripheral ~~defocus~~ retina).

[0143] As can be seen from the figure, the outer edges of the left lens 302 and the right lens~~es~~ 301 are symmetrically provided with ~~grooves~~ recesses 301 inward~~ly~~ along the baseline direction indicated by the dotted line (only one is shown in the figure, the other side is the same).~~,~~ ~~the~~ The

depth range between the ~~groove~~ recess 301 and the corresponding outer edge is d, and the value range of d is:

$$70mm < d < 100mm$$

[0144] With this structure, less ~~adjustment~~ accommodation is required in the secondary position than when reading in the primary position because the effect of degree of the lens edge ~~power~~ is reduced.

[0145] ~~-~~The above idea can also be applied to ~~opening~~ form a plurality of ~~grooves~~ recesses on the side of the lens and placing them in different positions as shown in the figure, which can also achieve the ~~adjustment~~ accommodation effect.

[0146] The foregoing description of the preferred embodiments is provided to enable any person skilled in the art to use or utilize the present ~~invention~~disclosure. Various modifications to these embodiments will be readily apparent to those skilled in the art, and the general principles described herein may be applied to other embodiments without ~~innovative~~ creativity steps. Thus, the present ~~invention~~ disclosure is not to be limited to the embodiments shown herein but should be accorded the widest scope consistent with the principles and novel features disclosed herein.

Claims

1. A kind of glassesGlasses for retarding the progression of myopia progression, comprising a frame and glasses legs, wherein temples and characterized in that each of the glasses legs said temples comprises of a first leg and a second leg, the first and second temples, said second leg temple being is connected between the said frame and said the first legtemple, said the second temple leg is movable moving telescopically in relation to said the first legtemple, in movement of the allowing said frame in relation relative to eyeballs to move from a primary position to a post-elongation secondary position stretched, the a relationship between the an effective degree and a lens degree is as followsdenoted by:

$$P_2 = P_1 / (1 - d_2P_1)$$

Wherein wherein P_1 is the actual lens degree at said the primary position, P_2 is the an effective lens degree at said the secondary position, and d_2 is the a spacing between said the primary position and the secondary position, which satisfythe spacing meets:

$$0<d_2<60\text{mm}.$$

2. The glasses for retarding myopia progression according to claim 1, wherein the said first leg temple comprises a plughole arranged at its a front end of the first leg, the said second leg temple being is telescopically and arranged at the a first end of the said plughole.

3. The glasses for retarding myopia progression according to claim 2, characterized in that saidwherein the glasses further comprise a

movable body, ~~said~~ the movable body ~~being~~ is embedded at ~~the~~ a second end of the ~~said~~ plughole, ~~said~~ the second legtemple ~~being~~ is arranged within ~~said~~ the plughole and connected to ~~said~~ the movable body.

4. The glasses for retarding myopia progression according to claim 3, ~~characterized in that~~ wherein a plurality of ~~a number of parallel~~ grooves are formed longitudinally and parallelly in the ~~cut along the vertical direction of the said~~ plughole, a ~~number~~ plurality of first parallel ribs are formed longitudinally in an insertion ~~being cut along the vertical direction at the plugging~~ head end of the ~~said~~ movable body, each of the ~~said~~ first ribs and a corresponding one of the ~~said~~ grooves are engaged with each other ~~being clamped~~.

5. The glasses for retarding myopia progression according to claim 4, ~~characterized in that the plugging~~ wherein an insertion tail end of the ~~said~~ movable body is provided ~~arranged~~ with a ~~number~~ plurality of concave-convex stripes and an ~~a convex horizontal bar shaped~~ operating portion of which a shape is a convex and transversal stripe.

6. The glasses for retarding myopia progression according to claim 3, ~~characterized in that said~~wherein the movable body comprises an intermeshed rack and pinion, an ~~adjustment~~ accommodatin knob arranged on ~~the~~ a side face of ~~said~~ the first leg is capable of ~~temple~~ rotating to drive the ~~rotation of said~~ pinion to rotate, ~~allowing said~~ such that the rack of the ~~said~~ movable body is moved ~~to move~~ and

telescopically adjust the a relative spacing between said the first leg and the second temples leg is telescopically adjusted.

7. The glasses for retarding myopia progression according to claim 3, characterized in that saidwherien the plughole further comprises a spring, a telescopic body, a turntable, a push rod and a chute, said the telescopic body being joined together is connected with said the second leg as a whole, a width of the telescopic body is temple with its width at the tail larger than the a width of an opening of the said plughole, said the spring housing being arranged is sleeved on said the telescopic body, an end of the said telescopic body is sleeved being arranged with said the turntable at its end, an outer circumferential surface of the said turntable is provided being arranged with a plurality number of parallel second ribs along the a central axis of the turntableouter circumference, the a first end of said the push rod is sleeved being sheathed within said the chute and protruding out of the an opening of the said chute, the a second end of said the push rod abuts being propped against said the turntable, said the chute being is arranged with a number plurality of one-way open and parallel chute openings, a head of the slots, said push rod is provided being arranged with a plurality number of pointy spiky protrusions at its head, and the opposing face between said turntable and said chute is arranged with a concave-convex meshing mechanism structure is provided on opposite surfaces of both the chute and the turntable;

wherein, by pushing saidpressing the push rod protruding out of the an end of the said plughole, said the push rod moves along said

the chute to force the ~~press said~~ turntable to move downward~~,~~; when ~~said~~ the turntable and ~~said~~ the chute are detached at ~~the~~ a meshing position, the ~~spiky~~ pointy protrusions at the head of ~~said~~ the push rod contact with ~~the~~ an oblique plane of the ~~said~~ turntable to generate~~,~~ ~~generating~~ a radial force, so as to drive ~~said~~ the turntable to rotate, ~~making said~~ the telescopic body abutting ~~propped~~ against one end of the ~~said~~ turntable is compressed~~to compress~~, ~~said~~ the spring outside the turntable is ~~being~~ in a compressed state, ~~said~~ the frame ~~being~~ is in ~~said~~ the primary position~~,~~; when ~~said~~ the push rod is pressed again, the ~~spiky~~ pointy protrusions of the head of ~~said~~ the push rod are detached from the oblique plane of the ~~said~~ turntable, ~~said~~ the turntable ~~rotating~~ rotates under the radial force, ~~said~~ the turntable and the chute are overlapped ~~overlapping~~ at the meshing position; ~~location of the said chute. With~~ along with a ~~the~~ stretching of ~~said~~ the spring, ~~said~~ the frame reaches the ~~arrives at said~~ secondary position.

8. The glasses for retarding myopia progression according to any one of claims 1-7, ~~characterized in that~~ wherein a plurality ~~number~~ of recesses ~~grooves~~ are formed ~~cut~~ at outer side edges of both a ~~flanks of said~~ left lens and a right lens~~lenses~~, ~~said grooves having their~~ a range of a depth d of each of the recesses is ~~take values within the range~~:

$$70\text{mm} < d < 100\text{mm}.$$

9. The glasses for retarding myopia progression according to claim

8, ~~characterized in that said grooves~~ wherein the recesses are formed ~~cut~~ along ~~the~~ a central horizontal baseline of both the left lens and the right lens on the outer side edges of the ~~flanks of said~~ left lens and the right ~~lenses~~ lens.

10. The glasses for retarding myopia progression according to claim 9, ~~characterized in that~~ wherein a cross-sectional shape~~s~~ of ~~said~~ the plughole comprises ~~include~~ rectangle, circle and ellipse.