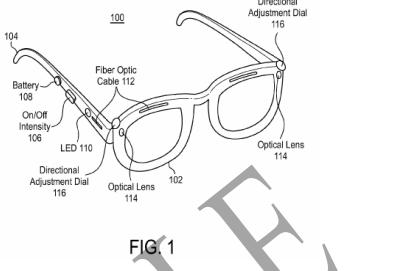
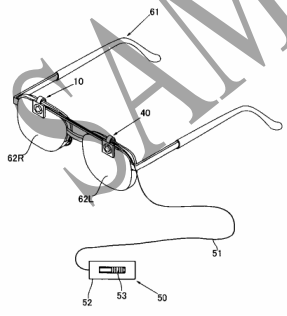
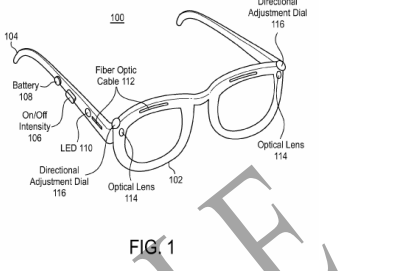
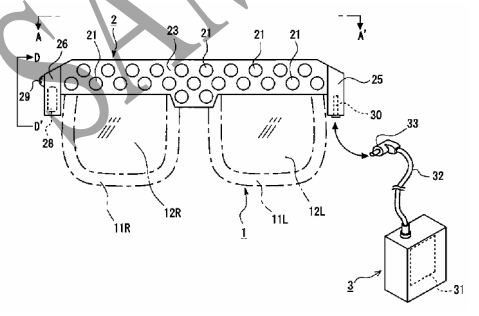
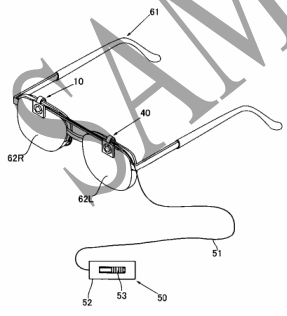
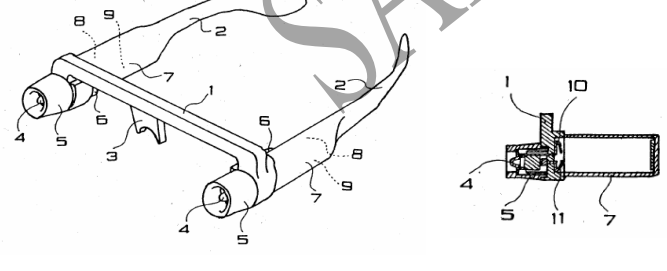


|               | Subject Patent  | Reference-1   | Reference-2  | Reference-3   |
|---------------|---|---|--|---|
| Patent/UM No. | US 7,438,409 B2   | JP2002-228992 A   | JP2005-134579 A  | JP61-70301 U  |
| Pub Date      | 10/21/2008  | 08/14/2002  | 5/26/2005  | 05/14/1986  |
| Filed Date    | 10/21/2005  | 02/06/2001  | 10/29/2003   | 10/13/1984  |
| Priority Date |   |   |  |   |
| Assignee      | Jordan; Lonnie (Leroy)  | KOUDOU:KK   | TSUKUSHI TOKUJI  | Akihiko Hanawa  |
| Title         | Illuminated reading glasses   | ILLUMINATOR AND SPECTACLE SYSTEM  | FLOODLIGHT IMPLEMENT FOR SPECTACLES, AND SPECTACLES  | Glasses-type illumination   |
| Abstract      | An illumination system and method are provided for use in conjunction with eyewear that includes a light source, a power switch configured to connect the light source to a power source and a light output configurable to be embedded within the eyewear, and to direct light to a remote location. The light output may be adjustable in various directions, intensity levels and focus. | <p>PROBLEM TO BE SOLVED: To provide an illuminator which illuminates books, etc., without being restricted in places to enable even persons having the presbyopia, cataract, glaucoma and other sight degradation to easily make reading, etc., and does not give unpleasantness to others and a spectacle system.</p> <p>SOLUTION: A substrate 23 mounted with an LED 21 for illumination is made freely attachable and detachable to and from the upper part of spectacles in such a manner that the LED 21 can illuminate the front. A mercury switch 28 within a holding section 26 disposed at the end of the substrate 23 is turned on and off by whether the angles of elevation and depression of the spectacles 1 is the angle on the side of the angle of elevation with respect to a reference angle. If the angles of elevation and depression of the spectacles 1 is the angle on the side of the angle of elevation with respect to the reference angle, the LED 21 is automatically extinguished by the mercury switch 28.</p>  | <p>PROBLEM TO BE SOLVED: To provide a floodlight implement for spectacles with which the attachment and detachment operation to and from the spectacles is easy, and to provide the spectacles equipped with the floodlight implement.</p> <p>SOLUTION: The floodlight implement for the spectacles includes a first floodlight implement 10 and a second floodlight implement 40. The first floodlight implement 10 (40) includes a first mount 11 (41) and a first light emitting section 13 (43). The mount 11 (41) has a holding structure for attachably and detachably attaching the projector to and from the upper part of the front of the spectacles. The first light emitting section 13 (43) is supported by the first mount 11 (41) and is so positioned as to face the front side of the spectacles. The second projector 40 is independent from the first projector 10. The spectacles include the floodlight implements, spectacle lenses 62R and 62L and a spectacle frame 61. The first mount 11 is attached to the spectacle lens 62R and the second mount 41 is attached to the spectacle lens 62L, respectively attachably and detachably. The transverse dimensions w1 of the mounts and the transverse dimensions w2 of the light emitting sections are below the transverse dimensions w3 of the spectacle lenses.</p>  | NOT AVAILABLE   |
| Equivalents   | US2007013865 (A1)   | None  | None   | None  |
| Fig.          |    |   |   |                    |
| Relevancy     |   | Y   | Y  | A   |
| Key Elements  | eyewear   | X: 1, 51, 61 (fig.1 etc.) spectacle   | X: spectacle lenses 62R and 62L and a spectacle frame 61 (fig.3)   | X: 1, 2 (fig.1) frame   |
|               | light source  | X: LED 21 (fig. 1 etc.)   | X: floodlight implement 10, 40 (fig.3)   | X: 4 (fig.1) lamp   |
|               | power switch  | X: 28 (fig.5 etc.) mercury switch, 63 (fig.11 etc.) micro switch  | X: 53 (fig.3 etc.) switch  | Y: 6 (fig.1) hinge  |
|               | power source  | X: 3 (fig. 1) power source  | X: 50 (fig. 3 etc.) power source   | X: 7, 8, 9 (fig.1) power source   |
| Claim-1       | An illumination system for use in conjunction with eyewear comprising:  | X<br>illumination is made freely attachable and detachable to and from the upper part of spectacles (claim 1)   | X<br>The floodlight implement for the spectacles includes a first floodlight implement and a second floodlight implement (claim 1)   | X<br>glasses-type illumination (claim)  |
|               | a light source embedded in the eyewear;   | X<br>illumination is made freely attachable and detachable to and from the upper part of spectacles (claim 1)   | X<br>a first floodlight implement and a second floodlight implement (10, 40 fig.3)   | X<br>lamp (4, fig. 1)   |
|               | a power switch configured to connect the light source to a power source;  | X<br>mercury switch (28 fig.5 etc.)<br>micro switch (63 fig.11 etc.)<br>power source (3 fig. 1)   | X<br>switch (53 fig.3)   | Y<br>the lamps are lighted by opening the hinges (example)<br>power source (claim 1; 7, 8, 9, fig. 1) |
|               | and a light transmitting device configurable to be embedded within the eyewear  | No  | No   | No  |
|               | wherein light intensity and direction of light from the light source are selectively controlled.  | Y<br>luminescence controller to controll amount of luminescence (claim3, claim 6)   | A<br>angle and area of light are controlled by sliding a first floodlight implement and a second floodlight implement (column 5, line 2-5)   | No  |
| Claim-19      | An illumination system for use in conjunction with protective eyewear comprising:   | Y<br>illumination is made freely attachable and detachable to and from the upper part of spectacles (claim 1)   | Y<br>The floodlight implement for the spectacles includes a first floodlight implement and a second floodlight implement (claim 1)   | Y<br>glasses-type illumination (claim)  |
|               | a light source embedded in the eyewear;   | X<br>illumination is made freely attachable and detachable to and from the upper part of spectacles (claim 1)   | X<br>a first floodlight implement and a second floodlight implement (10, 40 fig.3)   | X<br>lamp (4, fig. 1)   |
|               | a power source, configured to provide power to the light source;  | X<br>mercury switch (28 fig.5 etc.)<br>micro switch (63 fig.11 etc.)<br>power source (3 fig. 1)   | X<br>switch (53 fig.3)   | Y<br>the lamps are lighted by opening the hinges (example)<br>power source (claim 1; 7, 8, 9, fig. 1) |
|               | a power switch embedded within the protective eyewear and configured to activate the system;  | Y<br>illumination is automatically turned on/off by opening/closing the cover 62 with switch 63 (detailed description, column 5, [0049]-[0051])<br>63 micro switch (fig.11)   | Y<br>switch (53 fig.3)   | Y<br>the lamps are lighted by opening the hinges (example)<br>power source (claim 1; 7, 8, 9, fig. 1) |
|               | and a light transmitting device embedded within the protective eyewear  | No  | No   | No  |
|               | wherein light intensity and direction of light from the light source are selectively controlled.  | Y<br>luminescence controller to controll amount of luminescence (claim3, claim 6)   | A<br>angle and area of light are controlled by sliding a first floodlight implement and a second floodlight implement (column 5, line 2-5)   | No  |