【Claims】

1. An electronic device comprising:

an image capturing device comprising:

at least two lenses aligned along an optical axis;

an optical member disposed such that light passing through the at least two lenses is incident via a portion of a first surface of the optical member, the light is reflected at least twice within the optical member, the light is emitted out of the optical member via a first portion of a second surface of the optical member, and the light is reflected at a second portion of the second surface of the optical member, wherein the first portion of the second surface includes a second side corresponding to a length direction of the optical member and a first side substantially perpendicular to the length direction of the optical member, the second side being longer than the first side; and

an image sensor configured to detect the light emitted from the first portion of the second surface of the optical member through an imaging surface of the image sensor;

a memory storing instructions; and

a processor configured to execute the instructions to cause the electronic device to acquire an image by receiving external light using the image capturing device,

wherein the imaging surface of the image sensor includes a third side substantially parallel with the second side of the optical member, and a fourth side substantially parallel with the first side of the optical member, the fourth side of the imaging surface being longer than the third side of the imaging surface;

wherein the optical member and the image sensor are disposed such that:

the first portion of the second surface is substantially parallel with the imaging surface of the image sensor, and

a first length of the first side of the first portion of the second surface is longer than a second length of the fourth side of the imaging surface, and

wherein the optical member is configured to satisfy, 1.2 =< w/img-X =< 2.5 where 'w' is the first length of the first side of the first portion of the second surface, 'img-X' is the second length of the fourth side of the imaging surface, 'w/img-X' is a ratio of the first length to the second length.

2. The electronic device of claim 1, wherein the optical member is disposed such that the length direction of the optical member is substantially perpendicular to a length direction of the electronic device or substantially perpendicular to a length direction of the image sensor.

3. The electronic device of claim 1, wherein the processor is further configured to:

control the image capturing device to move at least one of the at least two lenses along the optical axis for an auto focusing, or

control the image capturing device to move the image sensor along the optical axis for the auto focusing.

4. The electronic device of claim 1, wherein the processor is further configured to:

control the image capturing device to move at least one of the at least two lenses along a direction perpendicular to the optical axis for an optical image stabilizing function, or

control the image capturing device to move the image sensor along the direction perpendicular to the optical axis for the optical image stabilizing function.

5. The electronic device of claim 1, wherein the processor is further configured to control the image capturing device to move or rotate the optical member for an image stabilizing function or a subject tracking function.

6. The electronic device of claim 1, further comprising:

a display,

wherein the image sensor is arranged such that a length direction of the image sensor is substantially parallel to a length direction of the display, and the optical member is arranged such that the length direction of the optical member is substantially perpendicular to the length direction of the display.

7. An electronic device comprising:

a housing;

a display disposed on a front surface of the housing;

at least two cameras disposed on a rear surface of the housing opposite to the front surface;

wherein one of the at least to cameras comprises:

at least two lenses aligned along an optical axis;

an image sensor including an imaging surface configured to detect at least a portion of light guided or focused by the at least two lenses, wherein the imaging surface is substantially parallel with the display;

an optical member disposed between the at least two lenses and the image sensor, including an incident surface facing the at least two lenses and an emission surface facing the image sensor, and configured to receive the light guided or focused by the at least two lenses via a portion of the incident surface, to reflect the received light at least twice within the optical member, and to emit the reflected light to the image sensor via a portion of the emission surface, wherein the emission surface is substantially parallel with the imaging surface,

wherein the image sensor is disposed such that a long side longer than another side of the imaging surface is parallel with a short side shorter than another side of the emission surface, and

wherein the electronic device and/or one of the at least to cameras is/are configured to satisfy 1.2 =< w/img-X =< 2.5 where ‘w’ is a first length of the short side of the emission surface, ‘img-X’ is a second length of a long side of the imaging surface, and ‘w/img-X’ is a ratio of the first length to the second length.

8. The electronic device of claim 7, wherein the optical member is configured to have an Abbe number Vd-1 that satisfies 25 =< Vd-1 =< 95.

9. The electronic device of claim 7, wherein the optical member includes an anti-reflection coating layer formed on at least one of the incident surface or the emission surface.

10. The electronic device of claim 7, wherein the optical member includes an infrared blocking coating layer formed on at least one of the incident surface or the emission surface.

11. The electronic device of claim 7, wherein the at least two lenses are configured to have a Field of View (FOV) that satisfies 5 degrees =< FOV =< 35 degrees.

12. The electronic device of claim 7, further comprising:

a second optical member aligned with the optical member along the optical axis with the at least two lenses interposed therebetween,

wherein the second optical member is configured to receive light incident from a direction different from that of the optical axis, and reflects the light in the direction of the optical axis, to guide the light to the at least two lenses.

13. The electronic device of claim 7, wherein the optical member has a shape of a parallelogram.

14. The electronic device of claim 13, wherein the optical member includes a first reflective surface inclined with respect to the incident surface, and a second reflective surface inclined with respect to the emission surface and substantially parallel with the first reflective surface.

15. The electronic device of claim 7, wherein at least one of a first angle between the incident surface and a first reflective surface or a second angle between a second reflective surface and the emission surface satisfies 15 degrees =< Ang-min =< 50 degrees, where ‘Ang-min’ is any one of the first angle and the second angle.