

6. The reflective unit of claim 4, wherein the medium is an index matching medium.

7. The reflective unit of claim 1, wherein the light blocking unit is spaced apart from the light reflecting unit.

8. The reflective unit of claim 1, wherein the reflecting cells of the light reflecting unit are arranged to face the blocking cells of the light blocking unit such that the blocking cells can absorb the external light reflected by the light reflecting unit when no voltage is applied to the electroactive polymer layer.

9. The reflective unit of claim 1, wherein the electrode includes a first electrode disposed under the electroactive polymer layer and a second electrode disposed over the electroactive polymer layer.

10. The reflective unit of claim 1, wherein the electrode is formed of a flexible material that is deformed according to the strain of the electroactive polymer layer.

11. The reflective unit of claim 1, further comprising a transparent substrate disposed on the light blocking layer.

12. The reflective unit of claim 11, further comprising a first anti-reflection layer disposed between the light blocking layer and the transparent substrate.

13. The reflective unit of claim 11, further comprising a second anti-reflection layer disposed on the transparent substrate.

14. The reflective unit of claim 1, wherein the electroactive polymer layer has a thickness of 0.001 to 100  $\mu\text{m}$ .

15. A flexible display comprising a plurality of pixels, wherein each of the plurality of pixels comprises:

an electroactive polymer layer which becomes strained when a voltage is applied thereto;

a light reflecting unit disposed over the electroactive polymer layer, the light reflecting unit comprising a plurality of reflecting cells which reflect light and are spaced apart from one another at a distance which changes according to a strain of the electroactive polymer layer; and

a light blocking layer disposed over the light reflecting unit, the light blocking layer comprising blocking cells which absorb light and are spaced apart from one another.

16. The flexible display of claim 15, wherein the reflecting cells are reflecting micro mirrors.

17. The flexible display of claim 15, further comprising sub-blocking cells disposed between the reflecting cells, which prevent external light from being reflected between the reflecting cells.

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