

OPTICAL DEVICE AND ELECTROLYTIC SOLUTION

ABSTRACT OF THE DISCLOSURE

An optical device is provided as an optical filter which comprises a pair of substrates at least one of which is transparent, at least one transparent electrode disposed on one side of the transparent substrate, at least one counter electrode, a spacer provided between a pair of the substrates at peripheries thereof, and an RED solution as a filtering material provided in a space between a pair of the substrates, the RED solution comprising a silver salt and a mixed solvent comprising DMSO and another solvent for dissolving the silver salt.

The transparent electrodes and the counter electrode are driven by applying a voltage thereto, and the silver salt is reversibly deposited and dissolved by controlling the voltage, whereby the RED solution is brought to be colored and to be colorless, respectively, so that an amount of light is adjusted.

Figure 1