ABSTRACT

DIFFRACTIVE MULTIFOCAL LENS

There is provided a diffractive multifocal lens, wherein a diffraction phase structure of a diffraction pattern has a structure expressed by the following formula:

$$\phi(\xi)=\begin{cases} p_1\xi, & 0\le\xi<w \\ p_2(\xi-0.5)-q\pi, & w\le\xi<1-w \\ p_1(\xi-1), & 1-w\le\xi\le 1 \end{cases} \quad \cdots (1)$$

wherein ξ indicates a position in a radial direction of the lens in one period of the diffraction pattern, and $\phi(\xi)$ indicates a value (radian) of a phase shift amount of light passing through the position of ξ from the phase of light passing through a reference plane.