

ZOOM LEANS AND IMAGING DEVICE

ABSTRACT OF THE DISCLOSURE

A zoom lens has an optical axis and includes: a negative first lens group capable of being moved for zooming and disposed nearest to the front end; a positive second lens group capable of being moved for zooming, and disposed behind the first lens group; and a positive third lens group disposed behind the second lens group. The zoom lens meets conditions expressed by inequalities:

$$0.02 < D12/fw < 0.13 \quad \text{..... (1)}$$

$$0.5 < D2G/fw < 0.95 \quad \text{..... (2)}$$

$$5 < TLW/fw < 8 \quad \text{..... (3)}$$

where D12 is a minimum distance on the optical axis between a back surface of the first lens group and a front surface of the second lens group, D2G is a distance between front and back surfaces of the second lens group, TLW is optical length of the zoom lens as set in the shortest focal length, and fw is the shortest focal length.

FIG. 1