

## ABSTRACT

A zoom lens which can be formed with a reduced overall length while physically necessary factors including a long back focus for allowing arrangement of a color separating prism therein and a telecentric property and besides can correct various aberrations including the chromatic aberration to a level suitable for an expensive three-plate type video camera and which includes a comparatively small number of component lenses and an image pickup apparatus which uses the zoom lens are disclosed. In the zoom lens (1), a first lens group (GI) having a positive refractive power and having a fixed position, a second lens group (GII) of the variable magnification type having a negative refractive power and having a position movable for magnification variation, a third lens group (GIII) having a positive refractive power and having a fixed position and a fourth lens group (GIV) having a positive refractive power and having a position variable for adjustment of a focal position upon magnification variation and upon focusing are disposed in order from an object side. The first lens group includes a cemented lens of a first lens (L1) in the form of a concave lens and a second lens (L2) in the form of a convex lens and a third lens (L3) in the form of a convex

meniscus lens having a convex face directed to the object side, disposed in order from the object side. The second lens group includes a fourth lens (L4) in the form of a concave lens and a cemented lens of a fifth lens (L5) in the form of a biconcave lens and a sixth lens (L6) in the form of a convex lens, disposed in order from the object side. The third lens group includes a two-element or three-element cemented lens including a seventh lens (L7) in the form of a biconvex lens positioned nearest to the object side and an eighth lens (L8) in the form of a concave lens bonded to the seventh lens. The fourth lens group includes a cemented lens of a concave lens having a concave face directed to the object side and a convex lens and a biconvex lens. At least one face of the two convex lenses in the fourth lens group is formed from an aspheric face.