

ABSTRACT OF THE DISCLOSURE

A NUMERICAL APERTURE CONTROLLING FILTER AND A METHOD FOR MANUFACTURING THE SAME

A numerical aperture controlling filter, including: a first region that allows, when a laser beam having a different wavelength is incident on the numerical aperture controlling filter, a transmission of laser beams having all the wavelengths; and a second region that blocks a transmission of a laser beam having a predefined wavelength, wherein: different materials are used for outermost layers of a first optical thin film that is formed in the first region and a second optical thin film that is formed in the second region; and an optical path length of either of the first optical thin film or the second optical thin film is adjusted by means of etching after depositing the first optical thin film and the second optical thin film.

Fig. 1A