

Abstract:

Image projection system.

A compact and efficient image projection system (1) is described. The projection beam (11) supplied by a projector (3) is incident on a beam splitter (7) in the form of a cholesteric filter. The cholesteric filter (7) reflects circularly polarized radiation having a wavelength which corresponds to the pitch of the molecular helix and
5 having a direction of rotation which corresponds to the direction of the molecular helix to a reflector (9). The circular direction of polarization reflected by the cholesteric filter (7) is inverted on the reflector (9) so that the beam (15) is subsequently passed to the screen (5) by the cholesteric filter (7).

10 Fig. 1.