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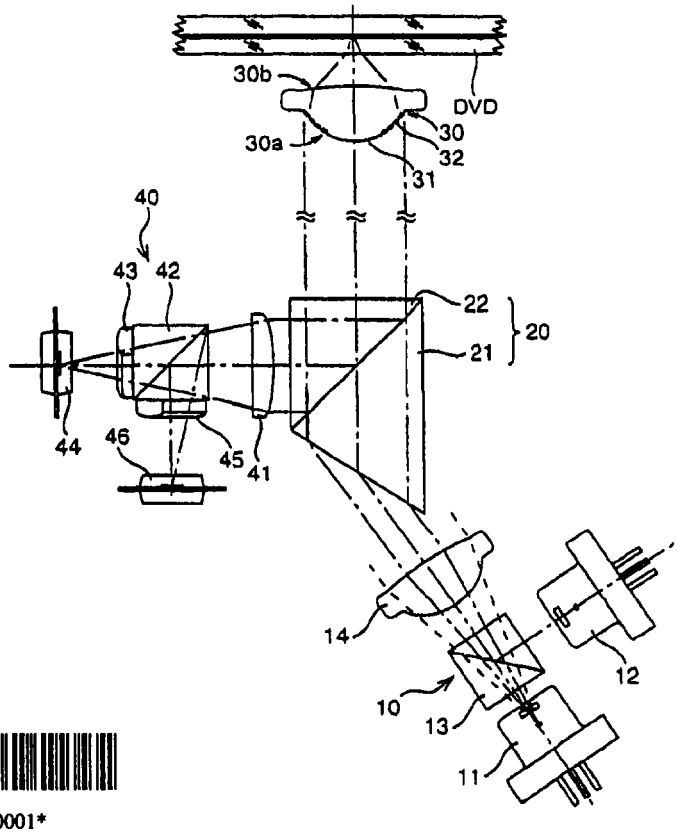
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(54) Title: OPTICAL SYSTEM OF OPTICAL PICK-UP

(57) Abstract

An optical system of an optical pick-up that is capable of using optical discs DVD and CD. The system includes a light source portion for selectively emitting a first laser beam (650 nm) and a second laser beam (780 nm), and an objective lens for converging the laser beam from the light source portion onto a recording layer of the optical disc. The objective lens is provided with a transmittance controlling phase grating in a peripheral region to have a wavelength dependence such that the transmittance for the first laser beam is higher than the transmittance for the second laser beam. The transmittance controlling phase grating is formed as a plurality of concentric grooves. Each of the grooves has a rectangular cross section in a plane containing an optical axis of the objective lens.



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