

Title (en)
OBJECTIVE LENS CONSISTING OF CRYSTAL LENSES

Title (de)
OBJEKTIV MIT KRISTALL-LINSEN

Title (fr)
OBJECTIF LENTILLE EN CRISTAL

Publication
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Application
EP 03708221 A 20030312

Priority
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• EP 0302549 W 20030312

Abstract (en)
[origin: WO03077007A2] An objective lens, especially a projection lens for a microlithographic projection illumination system comprising at least one fluoride crystal lens. The disruptive effect of double refraction is reduced by the fact that the lens is a lens (100) having an axis which is approximately perpendicular in relation to the crystal planes {100} or the equivalent crystal planes of the fluoride crystal. In objective lenses consisting of at least two fluoride crystal lenses it is advantageous to arrange the fluoride crystal lenses in such a way that they are skewed in relation to each other. The lens axes of the fluid crystal lenses can point in direction <111> or <110> in addition to direction <100> of the crystal. The disruptive effect of double refraction can also be reduced by using groups with skewed (110) lenses and groups with (111) lenses or groups with (110) lenses. The disruptive effect of double refraction can be further reduced by providing an optical element with a compensating coating.

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G02B 13/00

IPC 8 full level
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