

**MD.20.****Title** Optic filters based on anisotropic crystals**Authors** Sîrbu N., Dorogan A. , Ursachi V.**Institution** Techical University of Moldova**Patent no.** Pending patenting**Description****EN**

The optical anisotropy of  $\text{ZnP}_2$ ,  $\text{Cu}_2\text{ZnSiSe}_4$ , and  $\text{CdCa}_2\text{S}_4$  crystals are manifested by strong gyration effects, birefringence, dichroism, rotation of the polarization plane of light. The birefringence is characterized by the refractive indices, which coincide at the isotropic wavelength  $\lambda_0$ . These effects allow manufacturing narrowband "Band-pass" and "Band-Elimination" filters for optoelectronics and communication systems. The phenomena of optical activity affect and influence the spectral characteristics of photoelectronic devices, which can change the photo current sign depending on light polarization.

**Class no.** 5,10