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"EUROINVENT"

Technical University of Moldova,  
Department of Telecommunication and Electronic Systems

## Adjustable optical attenuator for testing optical communication systems and networks

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### Scope:

The invention relates to the field of optoelectronics and can be used to adjust the power level of the optical signal when adjusting and measuring the parameters of different medical and industrial optoelectronic devices, as well as in optical communication networks.

Brevet nr:  
MD 2110 G2  
din 28.02.2003

### Solution:

For the optical attenuator adjustable based on the magnetic-rheological fluid, the attenuation is guided using the external magnetic field and the attenuation method is based on the use of plasma oscillations of the free electrons in iron, in the spectral range 0.4 ... 6.0  $\mu\text{m}$ . The adjustable optical attenuator based on the magnetic-rheological fluid

Brevet nr:  
MD 2464 G2  
din 31.05.2004

### Stage:

3D computerized model;  
Functional prototype.

