

ABSTRACT:

Device in which electromagnetic radiation is raised in frequency and apparatus for optically scanning an information plane, comprising such a device.

An optical device (2) is described in which electromagnetic radiation is raised in frequency. To this end the device (2) comprises a diode laser (12) and a non-linear optical medium (31), which medium (31) ensures that the frequency of the radiation emitted by the diode laser (12) is raised. The diode laser (12) is a pulsed diode laser and feedback means (37) for setting the radiation emitted by the diode laser to a wavelength within the acceptance bandwidth of the medium are arranged in the optical device (2). The feedback may be realised opto-electronically or optically.

Furthermore, an apparatus for optically scanning an information plane, comprising such an optical device as a radiation source unit is described.

Fig. 1.

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