

Title (en)

TERAHERTZ RADIATION SOURCE AND METHOD FOR PRODUCING TERAHERTZ RADIATION

Title (de)

TERAHERTZSTRAHLUNGSQUELLE UND VERFAHREN ZUR ERZEUGUNG VON TERAHERTZSTRAHLUNG

Title (fr)

SOURCE DE RAYONNEMENT TÉRAHERTZ ET PROCÉDÉ POUR GÉNÉRER UN RAYONNEMENT TÉRAHERTZ

Publication

**EP 2324389 A1 20110525 (DE)**

Application

**EP 09779681 A 20090609**

Priority

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- DE 102008041107 A 20080807

Abstract (en)

[origin: WO2010015443A1] The present invention relates to a terahertz radiation source comprising a pulsed femtosecond fiber laser (1), a pulse shaper (2), an optical amplifier (3) and a nonlinear crystal (4), wherein the laser (1), pulse shaper (2), optical amplifier (3) and nonlinear crystal (4) are adapted and/or disposed in such a way that a laser pulse I, II, III, IV produced by the laser (1) first passes through the pulse shaper (2), then the optical amplifier (3) and then the nonlinear crystal (4); an imaging and/or spectroscopy system; a method for generating terahertz radiation; a method for detecting and/or examining life forms, objects and materials using such a system; and use of such a source and such a system.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2010015443A1

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