

Technology Offer

Method and radiation source for generating pulsed coherent radiation

Ref.-No.: 1302-3482-WT

The present invention relates to a method of generating pulsed coherent radiation in the UV and XUV wavelength ranges. Furthermore, the present invention relates to a radiation source for generating pulsed coherent radiation based on a high harmonic generation (HHG).

Technology

A method of generating pulsed coherent radiation, comprises the step of generating high harmonic pulses by an interaction of laser light pulses with a non-linear medium contained in a resonant cavity, wherein the non-linear medium is arranged in an environment of reduced pressure. Furthermore, a radiation source of generating pulsed coherent radiation is described, comprising a laser pulse source for generating laser light pulses, a resonant cavity including a non-linear medium for generating high harmonic pulses by an interaction of the laser light pulses with the non-linear medium, wherein the non-linear medium is arranged in an environment of reduced pressure.

Patent Information

US Patent (publication number) US7672342 B2, Priority Date: May 25, 2005.

Literature

A Frequency Comb in the Extreme Ultraviolet Christoph Gohle, Thomas Udem, Maximilian Herrmann, Jens Rauschenberger, Ronald Holzwarth, Hans A. Schuessler, Ferenc Krausz, and Theodor W. Hänsch, Nature 436, 234 (2005).

Contact

Dr. Wolfgang Tröger Senior Patent- & License Manager Physicist Phone: +49 (0)89 / 29 09 19 - 27 eMail: troeger@max-planck-innovation.de