

**Technology Offer** 

# Method and radiation source for generating pulsed coherent radiation

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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).

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