

Title (en)

AN IMPROVED HIGH HARMONIC GENERATION APPARATUS

Title (de)

VERBESSERTE VORRICHTUNG ZUR ERZEUGUNG VON HOHEN HARMONISCHEN

Title (fr)

APPAREIL DE GÉNÉRATION D'HARMONIQUES ÉLEVÉES AMÉLIORÉ

Publication

**EP 3790364 A1 20210310 (EN)**

Application

**EP 19195502 A 20190905**

Priority

EP 19195502 A 20190905

Abstract (en)

A high harmonic generation assembly and method for generating high harmonic radiation. The assembly comprises a cavity configured to receive input radiation and increase the intensity of the input radiation inside the cavity for forming drive radiation suitable for use in high harmonic generation. The assembly further comprises an interaction region within the cavity at which, in use, a medium is present, the medium being configured to generate harmonic radiation by high harmonic generation when the drive radiation is incident thereupon, and an optical assembly configured to direct the drive radiation to pass through the interaction region, and comprising an output coupler comprising an aperture through which at least a part of the generated harmonic radiation is able to exit the cavity. The the optical assembly is further configured to shape the drive radiation into a converging hollow beam before the drive radiation passes through the interaction region.

IPC 8 full level

**H05G 2/00** (2006.01)

CPC (source: EP)

**H05G 2/00** (2013.01)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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