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PROSKAUER ROSE LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110			MCCORMACK, JASON L	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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1. The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Laser-Driven Plasma-Based Light Source Having Optics for Forming an Elongated Plasma.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 8, 15, and 21 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Hertz et al. U.S. PGPUB No. 2002/0044629.

Regarding claim 1, Hertz discloses a plasma-based light source “a plasma P emitting the desired X-ray and EUV radiation” [0033], comprising: a pressurized chamber (3) “it is necessary to provide a suitable gas atmosphere in the low-pressure chamber” [0005] configured to contain an ionized gas (Wester U.S. PGPUB No. 2004/0016894 describes how, as a plasma radiates light, as described in Hertz, “Plasma 104 radiates light as the ionized gas molecules transition from the higher

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energy states back to the lower energy ground state. When Xenon is used to generate plasma 104, the plasma emits light having strong line emissions with wavelengths between 13 to 14 nm” [0006], it is therefore clear that the plasma (P) of Hertz, formed using xenon [0034], necessarily becomes an ionized gas as the plasma radiates light); a laser for providing a beam of laser energy to the ionized gas within the chamber to maintain a plasma “The energy beam is preferably a beam of electromagnetic radiation, such as laser radiation, which interacts with the jet and heats it to a plasma-forming temperature” [0024], the beam configured to maintain the plasma in an elongated form having a plasma length that is greater than that of a plasma diameter “an elongated laser focus might be formed over a certain length of the jet, for example by means of one or more cylinder lenses (not shown) in combination with one or more spherical lenses, resulting in an elongated EUV emitting plasma” [0042] (the Oxford English Dictionary defines “elongate” as “long in relation to width” thereby establishing that an “elongated” plasma is defined by having a length greater than its width); and a tool optically coupled to the chamber for collecting light generated by the plasma “A method and an apparatus is designed to produce X-ray or EUV radiation for use in lithography, microscopy, materials science, or medical diagnostics” [Abstract].

Regarding claim 8, Hertz discloses a plasma-based light source “a plasma P emitting the desired X-ray and EUV radiation” [0033], comprising: a pressurized chamber (3) “it is necessary to provide a suitable gas atmosphere in the low-pressure chamber” [0005] configured to contain an ionized gas (Wester U.S. PGPUB No.

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2004/0016894 describes how, as a plasma radiates light, as described in Hertz, “Plasma 104 radiates light as the ionized gas molecules transition from the higher energy states back to the lower energy ground state. When Xenon is used to generate plasma 104, the plasma emits light having strong line emissions with wavelengths between 13 to 14 nm” [0006], it is therefore clear that the plasma (P) of Hertz, formed using xenon [0034], necessarily becomes an ionized gas as the plasma radiates light); a laser for generating a beam of laser energy “The energy beam is preferably a beam of electromagnetic radiation, such as laser radiation, which interacts with the jet and heats it to a plasma-forming temperature” [0024]; an optical system coupled to the laser configured to maintain a plasma in an elongated form having a plasma length that is greater than that of a plasma diameter “an elongated laser focus might be formed over a certain length of the jet, for example by means of one or more cylinder lenses (not shown) in combination with one or more spherical lenses, resulting in an elongated EUV emitting plasma” [0042] (the Oxford English Dictionary defines “elongate” as “long in relation to width” thereby establishing that an “elongated” plasma is defined by having a length greater than its width); and a tool optically coupled to the chamber for collecting light generated by the plasma “A method and an apparatus is designed to produce X-ray or EUV radiation for use in lithography, microscopy, materials science, or medical diagnostics” [Abstract].

Regarding claim 15, Hertz discloses a method for producing light “a plasma P emitting the desired X-ray and EUV radiation” [0033], comprising: ionizing a gas

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