Optimization of EUV Lithography Light-Source from Laser-Produced Plasma

Tech ID: 21137 / UC Case 2006-165-0

TECHNOLOGY DESCRIPTION

Researchers at UC San Diego have developed and demonstrated a technique that reduces fast ion energies and thereby reduces ablated material with essentially no loss in conversion energy (laser input to plasma emission).

Existing methods are either complicated, expensive, or result in poor energy conversion. The present approach reduces fast ion energies up to a factor of thirty with no decrease in conversion energy. The technique is cost effective and allows use of solid density targets instead of droplets, foams, fibres, etc.

APPLICATIONS

Possible applications are to EUV lithography light-sources, EUV sources for microscopy, pulsed laser deposition (PLD), and laser produced plasma X-ray sources.

INTELLECTUAL PROPERTY INFO

This technology is presently available for licensing.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	8,536,549	09/17/2013	2006-165

CONTACT

University of California, San Diego
Office of Innovation and Commercialization
innovation@ucsd.edu
tel: 858.534.5815.

OTHER INFORMATION

CATEGORIZED AS

- **Semiconductors**
  - Processing and Production

RELATED CASES

2006-165-0

© 2010 - 2013, The Regents of the University of California
Terms of use
Privacy Notice