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(54) **Title:** SHORT-WAVELENGTH COHERENCE TOMOGRAPHY

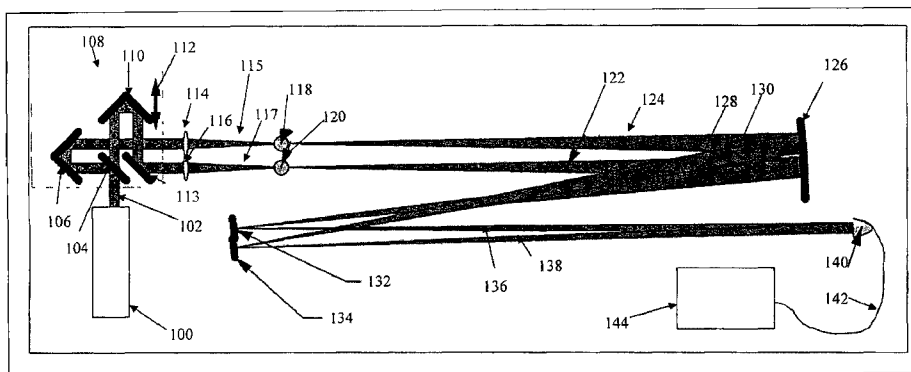


FIG. 1

(57) **Abstract:** The present invention relates generally to methods, systems and apparatuses for three dimensional and cross-sectional imaging of objects (e.g., silicon) and subjects at a nanometer-scale resolution using short wave-length (e.g., extreme ultra-violet) light.



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A CLASSIFICATION OF SUBJECT MATTER

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B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST(USPT,USOC,EPAB .JPAB), Google Patents, Google Scholar

Search Terms Used tomography, laser, femtosecond, beamsplitter, beam, splitter, first, second, pulse, interference, three, dimensional, mirrors, reflecting, radiation, wavelength, gas, harmonic, generator, mirror, toroidal

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 2005/0140982 A1 (CHEN et al) 30 June 2005 (30 06 2005) para (0005), [0008], [0016], [0019], [0031], [0042]	1-68
Y	US 7,139,078 B2 (HOGAN) 21 November 2006 (21 11 2006) coM , in 35-40. In 60-62, col 4, in 10-15, in 56-67, col 6, in 15-17	1-68
Y	US 5,921 ,926 A (ROLLAND et al) 13 July 1999 (13 07 1999) col 2 in 53-62, col 4, in 41-44 in 59-60 col 6, in 24-27	6-12. 22, 23, 42-44, 46 47
Y	US 6,999,491 B2 (RIEGER et al) 14 February 2006 (14 02 2006) col 25, in 44-47, col 26. in 1-6	17-19 53, 54
Y	US 6 327,335 B1 (CARROLL) 04 December 2001 (04 12 2001) col 10 in 19-23	20, 21

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* Special categories of cited documents	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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