

DOCKET NO.: 0107945.00246US24

Filed By: Donald R. Steinberg, Reg. No. 37,241
David L. Cavanaugh, Reg. No. 36,476
Michael H. Smith, Reg. No. 71,190
60 State Street
Boston, Massachusetts 02109
Tel: (617) 526-6000
Email: Don.Steinberg@wilmerhale.com
David.Cavanaugh@wilmerhale.com
MichaelH.Smith@wilmerhale.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASML Netherlands B.V., ASML US Inc., Excelitas Technologies Corp., and
Qioptiq Photonics GmbH & Co. KG,
Petitioners

v.

Energetiq Technology, Inc.,
Patent Owner.

Case IPR2016-00688

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,969,841
CLAIMS 4, 5, 6, 8, and 26**

TABLE OF CONTENTS

	<u>Page</u>
I. MANDATORY NOTICES	1
A. Real Parties-in-Interest	1
B. Related Matters	1
C. Counsel	2
D. Service Information	2
II. CERTIFICATION OF GROUNDS FOR STANDING	3
III. OVERVIEW OF CHALLENGE AND RELIEF REQUESTED	3
A. Grounds for Challenge	3
B. Prior Art Patents and Printed Publications Relied Upon	3
C. Relief Requested	4
IV. PERSON OF ORDINARY SKILL IN THE ART	4
V. OVERVIEW OF THE '841 PATENT	6
A. Summary of the Prosecution History	7
VI. CLAIM CONSTRUCTION	9
A. "Light source"	11
B. "Laser Driven Light Source"	13
C. "Substantially continuous laser"	14
VII. THE CHALLENGED CLAIMS ARE Unpatentable	14
A. Laser Sustained Plasma Light Sources Were Known Long Before the Priority Date of the '841 Patent	15
B. Sustaining a plasma with a laser at various wavelengths, including in the range of 700-2000 nm, was well known in the art	16
VIII. GROUNDS FOR FINDING THE CHALLENGED CLAIMS INVALID ...	24
A. Ground 1: Claims 4, 5, 6, 8, and 26 Are Unpatentable Over Gärtner in View of Mourou and Silfvast	24
1. Independent Claim 1	24
2. Dependent Claim 4	42
3. Dependent Claim 5	43

4.	Dependent Claim 6	43
5.	Dependent Claim 8	44
6.	Dependent Claim 26	45
7.	Reasons to Combine for Claims 4-6, 8, and 26.....	45
B.	Ground 2: Claims 4-6, 8, and 26 Are Unpatentable Over Gärtner in View of Kensuke and Silfvast	45
1.	Independent Claim 1	47
2.	Dependent Claim 4	56
3.	Dependent Claim 5	56
4.	Dependent Claim 6	56
5.	Dependent Claim 8	57
6.	Dependent Claim 26	57
7.	Reasons to Combine for Claims 4-6, 8, and 26.....	58
IX.	RESPONSE TO ARGUMENTS RAISED BY PATENT OWNER REGARDING OBJECTIVE INDICIA OF NON-OBVIOUSNESS	58
X.	CONCLUSION.....	60

I. MANDATORY NOTICES

A. Real Parties-in-Interest

ASML Netherlands B.V., ASML US Inc., Excelitas Technologies Corp., and Qioptiq Photonics GmbH & Co. KG (“Petitioners”) are the real parties-in-interest.

B. Related Matters

U.S. Patent No. 8,969,841 (“the ’841 patent,” Ex. 1201) is one member of a patent family of continuation and continuation in part applications. Exhibit 1202 shows the U.S. members of this patent family and the relationships among them. Petitioners have already filed two petitions seeking *inter partes* review of claims 1-3, 7, 10, 13, and 14 of the ’841 patent. On November 30, 2015, the Board instituted an *inter partes* review on claims 1-3 and 7; the other petition remains pending. (See Case No. IPR2015-01362 (PTAB Nov. 30, 2015)(Paper 12); Case No. IPR2016-00127 (pending)). Petitioners are also seeking *inter partes* review of related U.S. Patent Nos. 7,435,982 (“the ’982 patent”); 7,786,455 (“the ’455 patent”); 8,309,943 (“the ’943 patent”); 8,525,138 (“the ’138 patent”); 9,048,000 (“the ’000 patent”); and U.S. Patent No. 9,185,786 (“the ’786 patent”) in Case Nos. IPR2015-01300, IPR2015-01303, IPR2015-01377, IPR2016-00583, IPR2016-00584, IPR2016-00585, IPR2015-01279, IPR2016-00570, IPR2016-00575, IPR2015-00576, IPR2016-00578, IPR2016-00579, IPR2015-01277, IPR2016-00554, IPR2016-00556, IPR2016-00555, IPR2015-01368, IPR2016-00565,

IPR2016-00566, IPR2015-01362, IPR2016-00127, IPR2015-01375, IPR2016-00126, IPR2016-00771, and IPR2016-00776. The status of the other proceedings is summarized in Ex. 1213.

Petitioners may also file additional petitions on the '841, '000, and '786 patents. Petitioners request that the *inter partes* reviews of all these patents be assigned to the same Panel for administrative efficiency.

The following litigation matters would affect or be affected by a decision in this proceeding: *Energetiq Tech., Inc. v. ASML Netherlands B.V.*, No. 1:15-cv-10240-LTS (D. Mass.) and *In the Matter of Certain Laser-Driven Light Sources, Subsystems Containing Laser-Driven Light Sources, and Products Containing Same*, Inv. 337-TA-983 (U.S. International Trade Commission).

C. Counsel

Lead Counsel: Donald R. Steinberg (Registration No. 37,241)

Backup Counsel: David L. Cavanaugh (Registration No. 36,476)

Second Backup Counsel: Michael H. Smith (Registration No. 71,190)

D. Service Information

Email: Donald R. Steinberg, don.steinberg@wilmerhale.com

Post and Hand Delivery: WilmerHale, 60 State St., Boston MA 02109

Telephone: 617-526-6453

Facsimile: 617-526-5000

Petitioners consent to service by email.

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.