

DOCKET NO.: 0107495.00235US15

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., Excelitas Technologies Corp., and Qioptiq Photonics
GmbH & Co. KG,
Petitioners

v.

Energetiq Technology, INC.,
Patent Owner.

Case IPR2016-00566

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,525,138
CLAIM 21, 25, AND 27**

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 '138 PATENT	5
A. Summary of the Prosecution History	10
VI. CLAIM CONSTRUCTION	13
A. "Light source"	14
VII. THE CHALLENGED CLAIMS ARE INVALID	17
A. Laser-Sustained Light Sources Were Known Long Before the Priority Date of the '138 Patent	17
B. Sustaining a plasma with a laser operating within 10 nm of a strong absorption line was well known in the art	18
C. Using an optical element in a light source to modify a first spectrum to a second spectrum was well known in the art	23
VIII. GROUNDS FOR FINDING THE CHALLENGED CLAIMS INVALID	24
A. Ground 1: Claims 21, 25, and 27 are Unpatentable Over Gärtner in View of Beterov and Garcia	25
(a) Gärtner, Beterov, and Garcia are each prior art that was not considered by the Patent Office during examination	26
(b) Independent Claim 21 is Unpatentable Over Gärtner in View of Beterov and Garcia	26

(c)	Dependent Claims 25 and 27 are Unpatentable over Gärtner in view of Beterov and Garcia.....	37
(d)	Reasons to Combine for claims 21, 25 and 27.....	38
B.	Ground 2: Claims 21, 25 and 27 are Unpatentable Over Gärtner in View of Wolfram and Garcia.....	48
(a)	Gärtner, Wolfram, and Garcia are each prior art that was not considered by the Patent Office during examination.	48
(b)	Independent Claim 21 is Unpatentable Over Gärtner in View of Wolfram and Garcia	49
(c)	Dependent Claims 25 and 27 are Unpatentable over Gärtner in view of Wolfram and Garcia.....	51
(d)	Reasons to Combine for claims 21, 25 and 27.....	52
IX.	RESPONSE TO ARGUMENTS RAISED BY PATENT OWNER IN ITS PRELIMINARY INJUNCTION MOTION	53
A.	Patent Owner’s Arguments Regarding the Content of the Prior Art.....	54
B.	Patent Owner’s Arguments Regarding Objective Indicia of Non-Obviousness	55
X.	CONCLUSION.....	56

I. MANDATORY NOTICES

A. Real Parties-in-Interest

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

B. Related Matters

U.S. Patent No. 8,525,138 (“the ’138 patent,” Ex. 1201) is one member of a patent family of continuation and continuation-in-part applications. Exhibit 1202 shows the members of this patent family and the relationships among them.

Petitioners have already filed a petition seeking *inter partes* review of the ’138 patent and of related U.S. Patent Nos. 7,435,982 (“the ’982 patent”); 7,786,455 (“the ’455 patent”); 8,309,943 (“the ’943 patent”); 8,969,841 (“the ’841 patent”); and 9,048,000 (“the ’000 patent”), as summarized below:

Patent No.	IPR No.	Challenged Claims	Status
7,435,982	IPR2015-01300 IPR2015-01303	1, 3-4, 10, 16, 21, 24-27, 30, 31, 34, 37, 42-43, 49, 55, 61-64, 67, 68, 71, 72, 74, and 78	Instituted on all challenged claims
7,435,982	IPR2015-01377	23 and 60	Instituted on all challenged claims
7,786,455	IPR2015-01279	19, 39-41	Instituted on all challenged claims
8,309,943	IPR2015-01277	1, 3, 13, and 16	Instituted on all challenged claims
8,525,138	IPR2015-01368	1-5	Instituted on all challenged claims
8,969,841	IPR2015-01362	1, 2, 3, and 7	Instituted on all challenged claims

8,969,841	IPR2016-00127	10, 13, 14	Pending
9,048,000	IPR2015-01375	1, 15, and 18	Instituted on all challenged claims
9,048,000	IPR2016-00126	7-10	Pending

Petitioners are also filing additional petitions on the '138, '982, '455, '943, '841, and '000 patents, as well as on the related U.S. Patent No. 9,185,786 ("the '5786 patent")¹. Petitioners request that the *inter partes* reviews of the '138, '982, '455, '943, '841, '000, and '5786 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 Technology, 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. No. 337-TA-983.

C. Counsel

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

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

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

D. Service Information

¹ The use of the '5786 shortened form is to distinguish this patent from another Energetiq patent in the family, U.S. Patent No. 7,989,786 ("the '9786 patent").

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.