

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

SPTS TECHNOLOGIES LTD.  
Petitioner

v.

PLASMA-THERM LLC  
Patent Owner

---

**PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 8,980,764  
UNDER 35 U.S.C. §§311-319 AND 37 C.F.R. §42.100 ET SEQ.**

---

Case IPR2017-\_\_\_\_\_

Patent No. 8,980,764

Issued March 17, 2015

Filed February 11, 2013

Certificate of Correction issued June 23, 2015

---

**TABLE OF CONTENTS**

I.	INTRODUCTION .....	1
II.	STANDING.....	3
III.	FEE.....	3
IV.	MANDATORY NOTICES (37 C.F.R. §42.8(b)).....	4
	A. Real Part in Interest (37 C.F.R. §42.8(b)(1)).....	4
	B. Related Proceedings (37 C.F.R. §42.8(b)(2)) .....	4
	C. Lead and Back-up Counsel (37 C.F.R. §42.8(b)(1)).....	4
	D. Service Information (37 C.F.R. §42.8(b)(1)).....	5
	E. Power of Attorney (37 C.F.R. §42.8(b)(1)).....	5
V.	IDENTIFICATION OF CHALLENGE AND STATEMENT OF RELIEF REQUESTED.....	5
	A. Statement of Relief Requested.....	5
	B. Statutory Grounds and Claims .....	6
	C. Evidence Relied on in Support of the Challenge.....	6
VI.	OVERVIEW OF THE ‘764 PATENT.....	6
	A. Effective Filing Date of the ‘764 Patent.....	6
	B. State of the Art and Applicable Technologies.....	7
	1. Wafer Handling and Transfer.....	7
	2. Plasma Etching.....	11

3.	Wafer Dicing.....	12
C.	Summary of the '764 Patent.....	15
1.	The Patent Owner's Admitted Prior Art.....	15
a.	Plasma dicing.....	15
b.	Dicing frames.....	15
c.	Plasma dicing in combination with dicing frames...	15
d.	Etch chamber having plasma source adjacent wall...	16
e.	Wafer handling with minimal wafer contact.....	16
2.	Technical Overview of the Claims of the '764 Patent.....	16
a.	Independent Claim 1.....	17
b.	Dependent Claims 2-5.....	19
D.	Summary of Prosecution History.....	20
1.	Preliminary Amendment.....	20
2.	First (non-final) Office Action.....	20
3.	Amendment in Response to First Office Action.....	21
4.	Second (final) Office Action.....	21
5.	Amendment After Final and RCE.....	21
6.	Third (non-final) Office Action.....	22
7.	Amendment in Response to Third Office Action.....	22

8.	Telephone Interview and Allowance.....	24
9.	Issuance.....	24
10.	Certificate of Correction.....	25
E.	Person of Ordinary Skill in the Art.....	25
VII.	CLAIM CONSTRUCTION.....	25
A.	“plasma source”.....	26
B.	“adjacent to the wall of the process chamber”.....	27
C.	“lift mechanism”.....	27
D.	“touching a portion of the work piece overlapped by the frame”....	28
E.	“mechanical partition”.....	28
VIII.	GROUND OF CHALLENGE.....	28
A.	Claim Chart.....	29
B.	Argument.....	32
1.	Summary.....	32
2.	Brief Description of Elements.....	34
a.	Element A.....	35
b.	Elements B, C, D, E and G.....	35
c.	Element F.....	37
d.	Element H.....	38

e.	Element I.....	41
f.	Combination of Elements A through I.....	43
g.	Elements J-M of the Dependent Claims.....	44
3.	Obviousness Under the Framework of <u>Graham</u> .....	44
a.	Scope and Content of the Prior Art.....	45
i.	Sekiya ‘901 – What is discloses.....	45
ii.	Sekiya ‘901 – What is does not disclose.....	48
iii.	Todorow et al. – What is discloses.....	49
iv.	Sekiya ‘901 and Todorow et al. – What they do not disclose.....	52
v.	Nisany et al. and Ogasawara et al. – What they disclose.....	53
b.	Differences Between the Claims and Prior Art.....	57
c.	Level of Skill in the Art.....	57
d.	Rationales Supporting the Legal Conclusion of Obviousness.....	58
i.	Rationale #1.....	58
ii.	Rationale #2.....	61
iii.	Rationale #3.....	66
IX.	CONCLUSION.....	69
X.	APPENDIX OF EXHIBITS.....	70
XI.	CERTIFICATE OF WORD COUNT.....	72

# 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.