IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

DIODES INCORPORATED,

Petitioner,

v.

NORTH PLATE SEMICONDUCTOR, LLC,

Patent Owner.

U.S. Patent No. 7,564,097
Issue Date: July 21, 2009
Title: TRENCH-GATED MOSFET INCLUDING
SCHOTTKY DIODE THEREIN

Inter Partes Review No. IPR2018-01196

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,564,097



PETITIONER'S EXHIBIT LIST (37 C.F.R. § 42.63(e))

Ехнівіт	DESCRIPTION
1001	U.S. Patent No. 7,564,097 to Ono et al. ("the '097 patent")
1002	File History of U.S. Patent No. 7,564,097 to Ono et al.
1003	U.S. Pub. No. 2003/0040144 to Blanchard et al. ("Blanchard")
1004	U.S. Pub. No. 2003/0020134 to Werner et al. ("Werner")
1005	U.S. Patent No. 6,724,039 to Blanchard ("Blanchard '039")
1006	U.S. Pub. No. 2004/0164304 to Magri et al. ("Magri")
1007	Declaration of Sanjay Banerjee, Ph.D.
1008	Curriculum Vitae of Sanjay Banerjee, Ph.D.
1009	Selected pages from Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (John Wiley & Sons, Inc. 2004).



TABLE OF CONTENTS

I.	INTI	INTRODUCTION 1		
II.	MAN	NDATORY NOTICES (37 C.F.R. § 42.8(a)(1)) 3	-	
	A.	Real Party-in-Interest (37 C.F.R. § 42.8(b)(1)) 3	-	
	B.	Related Matters (37 C.F.R. § 42.8(b)(2))3	-	
	C.	Designation of Lead and Back-Up Counsel (37 C.F.R. § 42.8(b)(3))3	-	
	D.	Service Information (37 C.F.R. § 42.8(b)(4))3	-	
III.	PAY	MENT OF FEES (37 C.F.R. § 42.103) 3	-	
IV.	REQ	UIREMENTS FOR IPR PETITION UNDER 37 C.F.R. § 42.104 4	-	
	A.	Grounds for Standing (37 C.F.R. § 42.104(a)) 4	-	
	B.	Claims for Which Review Is Requested (37 C.F.R. § 42.104(b)(1))4	_	
	C.	Statutory Grounds of Challenge and Prior Art Relied Upon for Each Ground (37 C.F.R. § 42.104(b)(2))4		
	D.	Relevant Dates for the Prior Art Relied Upon 6	-	
	E.	Person of Ordinary Skill in the Art6	-	
	F.	Claim Construction (37 C.F.R. § 42.104(b)(3)) 6	-	
	G.	Unpatentability of the Construed Claims (37 C.F.R. § 42.104(b)(4))11	-	
	H.	Supporting Evidence (37 C.F.R. § 42.104(b)(5)) 11		
V.	THE	2 '097 PATENT 11 -	_	
	A.	Overview of the '097 Patent11	_	
	B.	Priority Date of the Claims of the '097 Patent 14	_	
VI.	SUM	SUMMARY OF PRIOR ART APPLIED IN THIS PETITION 14 -		
	A.	U.S. Publication 2003/0040144 to Blanchard et al. (Exh. 1003) 14	_	
	B.	U.S. Publication 2003/0020134 to Werner et al. (Exh. 1004) 17	_	
	C.	U.S. Patent No. 6,724,039 to Blanchard (Exh. 1005) 21	-	
	D.	U.S. Publication 2004/0164304 to Magri et al. (Exh. 1006) 22	_	



Petition for Inter Partes Review of U.S. Patent No. 7,564,097

VII.	DETAILED EXPLANATION OF GROUNDS		24 -
	A.	Ground 1: Claims 1-5 Are Unpatentable Under Pre-AIA 35 U.S.C. § 102 over Blanchard (Exh. 1003)	24 -
	В.	Ground 2: Claims 1-5 Are Unpatentable Under Pre-AIA 35 U.S.C. § 103(a) over Blanchard (Exh. 1003) in view of Magri (Exh. 1006)	48 -
	C.	Ground 3: Claims 1-5 Are Unpatentable Under Pre-AIA 35 U.S.C. § 102 over Werner (Exh. 1004)	57 -
	D.	Ground 4: Claim 3 Is Unpatentable Under Pre-AIA 35 U.S.C. § 103(a) over Werner (Exh. 1004) in view of Blanchard '039 (Exh. 1005)	77 -
	E.	Ground 5: Claims 1-5 Are Unpatentable Under Pre-AIA 35 U.S.C. § 103(a) over Werner (Exh. 1004) in view of Magri (Exh. 1006)	82 -
VIII	CON	CLUSION	- 87 -



TABLE OF AUTHORITIES

Cases	Page(s)
Phillips v. AWH Corp. 415 F.3d 1303 (Fed. Cir. 2005)	7
In re Translogic Tech., Inc. 504 F.3d 1249 (Fed. Cir. 2007)	7
<u>Statutes</u>	
35 U.S.C. § 102	2, 5, 6, 24, 57
Other Authorities	
37 C.F.R. § 42.6	89
37 C.F.R. § 42.8	3
37 C.F.R. § 42.15	3
37 C.F.R. § 42.24	88
37 C.F.R. § 42.24	88
37 C.F.R. § 42.100	6
37 C.F.R. § 42.103	3
37 C.F.R. § 42.104	4, 6, 11



DOCKET

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.

