EXHIBIT 2

IPR2016-00894 U.S. Patent No. 8,933,945 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC., Petitioner,

V.

ADVANCED SILICON TECHNOLOGIES LLC
Patent Owner

Case IPR2016-00894 U.S. Patent No. 8,933,945 B2

.....

PATENT OWNER'S PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.107(a)



IPR2016-00894 U.S. Patent No. 8,933,945 B2

TABLE OF CONTENTS

						PAGE				
I.	Intro	duction	& S	umma	ary of Arguments	1				
Π.	The '945 Patent									
	A.	The '9	45 F	atent	Discloses Improved Graphics Pipelines	2				
	В.	The Challenged Claims of the '945 Patent								
Ш.	The Primary Asserted References									
	A.	Narayanaswami								
	B.	Gove .				12				
IV.	The Correct Claim Construction of Material Disputed Terms									
	A.	The Controlling Claim Construction Standard								
	B.	The Material Claim Construction Issue Facing The Board								
		1.	"me	mory	controller"	17				
		;	a.	The C	Correct Construction Of "memory controller".	17				
		1	b.		swagen's Petition Depends On An Incorrect Apported Construction Of "memory controller"					
				i.	Volkswagen neither alleges nor proves that is construction is the ordinary meaning of the commemory controller"	laimed				
				ii.	Volkswagen neither alleges nor proves that i construction is some purported special definithe claimed "memory controller"	ition of				
		2.	"scan converter"							
		;	a.		n converter" Should Be Construed To Have Its					
		1	b.		swagen Failed To Argue Or Prove Any Clear nbiguous Special Definition Or Disavowal					
	C.			_	Claim Construction Dispute Is Not Material Be Decided By The Board	29				



V.	Volkswagen's Petition Fails With Respect To All Challenged Claims30							
	A.	All Challenged Claims: Gove Cannot Cure Narayanaswami's Admitted Deficiencies Regarding The "Memory Controller" And "Same Chip" Limitations						
		1.	Under the correct construction, Gove indisputably does not disclose the missing claimed "memory controller"					
		2.	Volkswagen failed to identify evidence sufficient to meet its burden of proving that it would have been obvious to combine Gove with Narayanaswami to provide the missing "memory controller" and "same chip"					
			a.	Volkswagen identifies no explanation for how a person ordinary skill would have combined Narayanaswami and Gove	d			
			b.	Volkswagen fails to establish a reasonable likelihood of proving why a person of ordinary skill would have combined Narayanaswami and Gove				
	В.	All Challenged Claims: A Pipeline "operative to process data in a dedicated tile"						
VI.	Volkswagen's Petition Also Fails With Respect To Various Limitations Specific To Certain Challenged Dependent Claims							
	A.	A. Dependent Claims 2 And 3: "a two dimensional partitioning memory"						
		1.		rayanaswami teaches away from "two dimensional titioning of memory"	.49			
		2.	wit	nbining "two dimensional partitioning of memory" h Narayanaswami would result in an inoperable tem	.51			
	В.	Dependent Claim 5: "scan converter operative to determine the portion of the pixel data to be processed by the back end circuitry"						
VII.	Conc	Conclusion5						



IPR2016-00894 U.S. Patent No. 8,933,945 B2

TABLE OF AUTHORITIES

	Page(s)
Cases	
ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082 (Fed. Cir. 2003)	19
Ariosa Diagnostics v. Verinata Health, Inc., et al., IPR2013-00276, Paper 43 (PTAB Oct. 23, 2014)	36
Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324 (Fed. Cir. 2012)	17, 24
<i>In re Beasley</i> , 117 Fed. Appx. 739 (Fed. Cir. 2004)	39
Becton, Dickinson and Co. v. One StockDuq Holdings, LLC, IPR2013-00235, Paper 30 (PTAB Sept. 25, 2014)	passim
Callcopy v. Verint Americas, et al., IPR2013-00486, Paper 11 (PTAB Feb. 5, 2014)	35
<i>In re Chaganti</i> , 554 Fed. Appx. 917 (Fed. Cir. 2014)	36
Ericcson, Inc. v. Intellectual Ventures I LLC, IPR2014-00921, Paper 8 (PTAB Dec. 16, 2014)	16, 24
Galderma Labs., L.P. v. Tolmar, Inc., 737 F.3d 731 (Fed. Cir. 2013)	40
<i>In re Gordon</i> , 733 F.2d 900 (Fed. Cir. 1984)	51, 52
<i>In re Gurley</i> , 27 F.3d 551 (Fed. Cir. 1994)	51, 52
Hill-Rom Services, Inc. v. Stryker Corporation, 755 F.3d 1367 (Fed. Cir. 2014)	16, 17, 24



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.

