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

Valeo North America, Inc., Valeo S.A., Valeo GmbH, Valeo Schalter und Sensoren GmbH, and Connaught Electronics Ltd. Petitioners

v.

Magna Electronics, Inc.
Patent Owner

U.S. Patent No. 8,643,724 Case IPR2015-*To be Assigned* 

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
United States Patent and Trademark Office
Madison Building (East)
600 Dulany Street
Alexandria, VA 22313

PETITION FOR INTER PARTES REVIEW U.S. PATENT NO. 8,643,724



### **TABLE OF CONTENTS**

I.	INT	RODUCTION			
II.	MANDATORY NOTICES				
	A.	Real Party-In-Interest3			
	B.	Rela	ted Matters	3	
	C.	Lead	l and Back-up Counsel	4	
	D.	Serv	ice Information	4	
III.	PAY	MENT	Γ OF FEES	5	
IV.	REQUIREMENTS FOR INTER PARTES REVIEW				
	A.	Grou	ands for Standing	5	
	B.	Identification of Challenge		6	
		1.	The Specific Art and Statutory Ground(s) on Which Challenge Is Based		
		2.	How the Construed Claims Are Unpatentable and S Evidence Relied Upon to Support the Challenge		
V.	FACTUAL BACKGROUND				
	A.	Declaration Evidence			
	B.	The State of the Art			
	C.	Summary of the '724 Patent			
	D.	Sum	mary of the Prosecution History	20	
VI.	BROADEST REASONABLE CONSTRUCTION				
	A.	Construction of terms used in the challenged claims			
	B.		the Construed Claims Are Unpatentable and lence Relied Upon to Support the Challenge		



VII.	GROUNDS OF UNPATENTABILITY ON WHICH PETITIONER IS LIKELY TO PREVAIL 25				
	A.	Claims 1-18, 20, 22, 23, 25, 29, 30, 31, 32, 41, 42, 43, and 48 of the '724 Patent are obvious over Nissan, Hino, and Lemelson			
	B.	Claim 19 of the '724 Patent is obvious over Nissan, Hino, Lemelson, and Wang			
	C.	Claim 21 is obvious over Nissan, Hino, Lemelson, and Aishin 44			
	D.	Claim 24 is obvious over Nissan, Hino, Lemelson, and Niles 45			
	E.	Claim 26 is obvious over Nissan, Hino, Lemelson, Aishin, and Schmidt			
	F.	Claims 27 and 28 are obvious over Nissan, Hino, Lemelson, and Fuji.			
	G.	Claims 33, 35, and 36-38 are obvious over Nissan, Hino, Lemelson, and Otsuka			
	H.	Claim 34 is obvious over Nissan, Hino, Lemelson, Otsuka, and Conner			
	I.	Claim 39 is obvious over Nissan, Hino, Lemelson, Otsuka, and Sato.			
	J.	Claim 40 is obvious over Nissan, Hino, Lemelson, Otsuka, and Paff.			
	K.	Claim 44 is obvious over Nissan, Hino, Lemelson, and King 55			
	L.	Claim 45 is obvious over Nissan, Hino, Lemelson, and Goesch 57			
	M.	Claims 46 and 47 are obvious over Nissan, Hino, Lemelson, and Lelong			
VIII.	CON	CLUSION59			



#### **EXHIBIT LIST**

Ex. 1001	U.S. Pat. No. 8,643,724 to Schofield.
Ex. 1002	U.S Pat. No. 6,553,130 to Lemelson.
Ex. 1003	Japanese Publication No. JP3099952 assigned to Nissan Motor Co., Ltd.
Ex. 1004	Certified English Translation of Japanese Publication No. JP3099952 assigned to Nissan Motor Co., Ltd.
Ex. 1005	Japanese Publication No. JPA64-14700 assigned to Aishin Warner Kabushiki-Kaisha.
Ex. 1006	Certified English Translation of Japanese Publication No. JPA64-14700 assigned to Aishin Warner Kabushiki-Kaisha.
Ex. 1007	Japanese Publication No. 62-16073 assigned to Hino Motors Ltd.
Ex. 1008	Certified English Translation of Japanese Publication No. 62-16073 assigned to Hino Motors Ltd.
Ex. 1009	Wang, G., et al. "CMOS Video Cameras", IEEE, 1991, dated May 27-31, 1991.
Ex. 1010	Great Britain Patent No. GB 2233530 assigned to Fuji Jukogyo Kabushiki Kaisha.
Ex. 1011	Japanese Publication No. H2-36417 assigned to Niles Co., Ltd.
Ex. 1012	Certified English Translation of Japanese Publication No. H2-36417 assigned to Niles Co., Ltd.
Ex. 1013	U.S Patent No. 5,444,478 to Lelong.
Ex. 1014	U.S. Patent No. 4,693,788 to King.
Ex. 1015	U.S. Patent No. 4,966,441 to Conner.
Ex. 1016	U.S. Patent No. 5,793,420 to Schmidt.



### Petition for Inter Partes Review of U.S. Patent No. 8,643,724

Ex. 1017	SAE Paper No. 871288 to Otsuka.
Ex. 1018	U.S. Patent No. 4,833,534 to Paff.
Ex. 1019	Expert Declaration of Dr. George Wolberg
Ex. 1020	Expert Declaration of Dr. Ralph Wilhelm
Ex. 1021	U.S. Patent No. 4,390,895 to Sato.
Ex. 1022	SAE Paper No. 890288 to Goesch.
Ex. 1023	Japanese Article "Television Image Engineering Handbook, The Institute of Television Engineers of Japan" ("JP Handbook").
Ex. 1024	English Translation of Japanese Article "Television Image Engineering Handbook, The Institute of Television Engineers of Japan" ("JP Handbook").
Ex. 1025	Dr. George Wolberg Curriculum Vitae
Ex. 1026	Robert Nathan, Digital Video Data Handling, NASA JPL Tech Report 32-877, Pasadena, CA, Jan. 5, 1966.
Ex. 1027	P. Burt et al., A Multiresolution Spline with Application to Image Mosaics, ACM Transactions on Graphics, Vol. 2. No. 4, Pages 217-236, October 1983.
Ex. 1028	Lisa Gottesfeld Brown, A Survey of Image Registration Techniques, vol. 24, ACM Computing Surveys, pp. 325-376, 1992.
Ex. 1029	George Wolberg, Digital Image Warping, IEEE Computer Society Press, 1990.
Ex. 1030	N. Greene et al., Creating Raster Omnimax Images from Multiple Perspective Views Using the Elliptical Weighted Average Filter, IEEE Computer Graphics and Applications, vol. 6, no. 6, pp. 21-27, June 1986.
Ex. 1031	Richard Szeliski, Image Mosaicing for Tele-Reality Applications, DEC Cambridge Research Laboratory, CRL 94/2, May 1994.



# 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.

