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 IPR2015	1

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.	INTR	RODUCTION	1
II.	MAN	NDATORY NOTICES UNDER 37 C.F.R. § 42.8(B)	2
	A.	Real Party-In-Interest	2
	B.	Related Matters	2
	C.	Lead and Back-up Counsel	3
	D.	Service Information	3
III.	NON	REDUNDANT GROUNDS	3
IV.	PAYMENT OF FEES		5
V.	REQ	UIREMENTS FOR IPR UNDER 37 C.F.R. § 42.104	5
	A.	Grounds for Standing	5
	B.	Identification of Challenge	5
	C.	Identification of Prior Art	6
	D.	How The Construed Claims Are Unpatentable And Supporting Evidence Relied Upon To Support The Challenge	_
VI.	FAC	TUAL BACKGROUND	8
	A.	Summary of the '724 Patent	8
	B.	Summary of the Prosecution History	10
	C.	Level of Ordinary Skill in the Art	10
	D.	Declaration Evidence	10
VII.	CLA	IM CONSTRUCTION	10
VIII.	GROUNDS OF UNPATENTABILITY ON WHICH PETITIONER IS LIKELY TO PREVAIL		
IX.	CONCLUSION		



EXHIBIT LIST

Ex. 1001	U.S. Pat. No. 8,643,724 to Schofield.
Ex. 1002	Japanese Publication No. JP H7-30149 assigned to Masatoshi Yamamoto
Ex. 1003	Certified English Translation of Japanese Publication No. JP H7-30149 assigned to Masatoshi Yamamoto ("Yamamoto")
Ex. 1004	Japanese Publication No. H2-117935 assigned to Mitsubishi Motors Corporation
Ex. 1005	Certified English Translation of Japanese Publication No. H2-117935 assigned to Mitsubishi Motors Corporation ("Mitsubishi")
Ex. 1006	U.S Pat. No. 6,553,130 to Lemelson ("Lemelson").
Ex. 1007	Japanese Publication No. JPA64-14700 assigned to Aishin Warner Kabushiki-Kaisha.
Ex. 1008	Certified English Translation of Japanese Publication No. JPA64-14700 assigned to Aishin Warner Kabushiki-Kaisha ("Aishin").
Ex. 1009	Wang, G., et al. "CMOS Video Cameras", IEEE, 1991, dated May 27-31, 1991 ("Wang").
Ex. 1010	Great Britain Patent No. GB 2233530 assigned to Fuji Jukogyo Kabushiki Kaisha ("Fuji").
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. ("Niles")
Ex. 1013	U.S. Patent No. 4,963,788 to King ("King").
Ex. 1014	U.S. Patent No. 4,966,441 to Conner ("Conner").
Ex. 1015	U.S. Patent No. 5,793,420 to Schmidt ("Schmidt").
Ex. 1016	SAE Paper No. 871288 to Otsuka ("Otsuka").



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

Ex. 1017	U.S. Patent No. 4,833,534 to Paff ("Paff").
Ex. 1018	U.S. Patent No. 4,390,895 to Sato ("Sato").
Ex. 1019	SAE Paper No. 890288 to Goesch ("Goesch").
Ex. 1020	Expert Declaration of Dr. George Wolberg
Ex. 1021	Dr. George Wolberg Curriculum Vitae
Ex. 1022	Expert Declaration of Dr. Ralph Wilhelm
Ex. 1023	Dr. Ralph V. Wilhelm Curriculum Vitae
Ex. 1024	Robert Nathan, Digital Video Data Handling, NASA JPL Tech Report 32-877, Pasadena, CA, Jan. 5, 1966.
Ex. 1025	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. 1026	Lisa Gottesfeld Brown, A Survey of Image Registration Techniques, vol. 24, ACM Computing Surveys, pp. 325-376, 1992.
Ex. 1027	George Wolberg, Digital Image Warping, IEEE Computer Society Press, 1990.
Ex. 1028	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. 1029	Richard Szeliski, Image Mosaicing for Tele-Reality Applications. DEC Cambridge Research Laboratory, CRL 94/2, May 1994.
Ex. 1030	G. Wolberg, "A Two-Pass Mesh Warping Implementation of Morphing," Dr. Dobb's Journal, no. 202, July 1993.
Ex. 1031	T. Porter and T. Duff, "Compositing Digital Images," <i>Computer Graphics</i> (Proc. Siggraph), vol. 18, no. 3, pp. 253-259, July 1984



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

Ex. 1032	SAE Paper No. 750364 to Nolan
Ex. 1033	SAE Paper No. 890282 to Corsi
Ex. 1034	SAE Paper No. 890283 to Brandt
Ex. 1035	SAE Paper No. 860173 to Ortega
Ex. 1036	SAE Paper No. 930456 to Gumkowski
Ex. 1037	U.S. Patent No. 6,693,524 to Payne
Ex. 1038	SAE Paper No. 770274 to Smith
Ex. 1039	Declaration of Gerard Grenier in Support of IEEE publication Wang, G., et al "CMOS Video Cameras"
Ex. 1040	Tremblay, M., et al. High resolution smart image senor with integrated parallel analog processing for multiresolution edge extraction, Robotics and Autonomous Systems 11 (1993), pp. 231-242.
Ex. 1041	Abstract for the Publication of High Resolution Smart Image Sensor
Ex. 1042	Lu, M., et al. On-chip Automatic Exposure Control Technique, Solid-State Circuits Conference, 1991. ESSCIRC '91. Proceedings – Seventeenth European (Volume:1)
Ex. 1043	IEEE.org Abstract On-chip Automatic Exposure Control Technique
Ex. 1044	CMOS sensor page of University of Edinburgh



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.

