UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC. and
PORSCHE CARS NORTH AMERICA, INC.,
Petitioner

v.

YECHEZKAL EVAN SPERO,
Patent Owner

Case IPR2023-00328[1]
U.S. Patent No. 10,894,503 B2

PETITIONER VOLKSWAGEN GROUP OF AMERICA, INC.'S UPDATED EXHIBIT LIST

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[1] Porsche Cars North America, Inc., which filed a petition in IPR2023-01320, has been joined as a party to this proceeding

Petitioner Volkswagen Group of America, Inc. ("Petitioner") serves this Updated Exhibit List to accompany service of Exhibit 1072.

Exhibit #	Description
1001	U.S. Patent No. 10,894,503 B2 to Spero ("the '503 patent")
1002	File History of U.S. Patent No. 10,894,503 B2 ("Prosecution History")
1003	Declaration of Dr. Jianzhong Jiao ("Jiao Decl.") in support of Petition for *Inter Partes* Review of U.S. Patent No. 10,894,503
1004	*Curriculum Vitae* of Dr. Jianzhong Jiao
1005	U.S. Patent No. 6,144,158 to Beam
1006	U.S. Patent Publication No. 2001/0019486 to Thominet
1007	WIPO Patent Publication No. 2001/070538 to Stam *et al*.
1008	U.S. Patent No. 6,049,749 to Kobayashi
1009	WIPO Patent Publication No. 2002/004247 to Braun *et al*.
1010	WIPO Patent Publication No. 1998/054030 to Karlsson
1011	WIPO Patent Publication No. 2001/001038 to Harbers *et al*.
1012	U.S. Patent No. 5,588,733 to Gotou
1013	WIPO Patent Publication No. 1986/005147 to Flaaten
1014	U.S. Patent No. 5,707,129 to Kobayashi
1015	Westermann, "History and Scientific Back-up," 48th Session of GRE, EUREKA Project 1403, Informal Document No. 30, April 30, 2002
1016	"Adaptive Front Lighting Systems (AFS)," 48th Session of GRE, EUREKA Project 1403, Informal Document No. 28, April 12, 2002
1017	Hogrefe *et al*., "Adaptive Light Pattern – A New Way to Improve Light Quality," SAE Transactions, Vol. 106, No. 6, pp. 1-10, February 27, 1997
1018	Löwenau *et al*., "Adaptive Light Control – A New Light Concept Controlled by Vehicle Dynamics and Navigation, SAE Transactions, Vol. 107, No. 6, pp. 31-36, February 26, 1998
1019	Manassero *et al*., "Adaptive Headlamp: A contribution for Design and Development of Motorway Light," SAE Transactions, Vol. 107, No. 6, pp. 1-6, February 26, 1998
1020	Michael Hamm, "System Strategies for Adaptive Lighting Systems," 2001 Symposium: Progress in Automobile Lighting (PAL), pp. 368-380, September 26, 2001

Exhibit #	Description
1021	U.S. Patent Publication No. 2013/0258688 to Kalapodas
1022	*Intentionally Left Blank*
1023	Manassero et al., Adaptive Lighting Systems: Technical Solutions and Methodological Approach for Photometric Specifications, Progress in Automotive Lighting Vol. 6, pp. 514-525 (1999).
1024	Hanno Westermann, Lighting Performance Requirements in Vehicle Lighting Exemplified by System Requirements for AFS, Progress in Automotive Lighting Vol. 6, pp. 807-820 (1999).
1025	Diem et al., Analysis of the Eye-Movement Behaviour During Use Moveable Headlamps, Progress in Automotive Lighting Vol. 5, pp. 185-207 (1999).
1026	Kobayashi & Sugimoto, Development of the Phase-I AFS Front Lighting System, Progress in Automotive Lighting Vol. 5, pp. 449-464 (1999).
1027	*Intentionally Left Blank*
1028	Bernhard Wörner, Adaptive Frontlighting – Experimental System, Development and Functional Evaluation, Progress in Automotive Lighting Vol. 6, pp. 844-853 (1999).
1029	*Intentionally Left Blank*
1030	Assessment of Headlamp Glare and Potential Countermeasures, Survey of Advanced Front Lighting System (AFS) Research and Technology, National Highway Traffic Safety Administration (2005)
1031	*Intentionally Left Blank*
1032	First Amended Complaint, Torchlight Techs. LLC v. Daimler AG, et al., Civil Action No. 1:22-cv-00751 (D. Del.), filed August 26, 2022 (ECF No. 24)
1033	File History of Ex Parte Reexamination of U.S. Patent No. 9,955,551, Control No. 90/014,815
1034	*Intentionally Left Blank*
1035	United States District Courts – National Judicial Caseload Profile, June 2022
1036	U.S. Patent No. 5,523,193 to Nelson
1037	U.S. Patent No. 5,537,433 to Watanabe
1038	U.S. Patent No. 4,662,746 to Hornbeck
1039	U.S. Patent No. 5,061,049 to Hornbeck
1040	U.S. Patent No. 5,933,183 to Enomoto *et al*.

Exhibit #	Description
1041	*Intentionally Left Blank*
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1051	Supplemental Declaration of Dr. Jianzhong Jiao
1052	Transcript of the Deposition of Matthew A. Turk, Ph.D., in IPR2023-00197 regarding U.S. Patent No. 10,894,503
1053	Transcript of the Deposition of Matthew A. Turk, Ph.D., in IPR2023-00315 regarding U.S. Patent No. 9,955,551
1054	Transcript of the Deposition of Matthew A. Turk, Ph.D., in IPR2022-01586 regarding U.S. Patent No. 11,208,029
1055	*Intentionally Left Blank*
1056	Moddel, G., Spatial Light Modulators: Processing Light in Real Time, *Optics and Photonics News*, pp. 17-21 (March 1997)
1057	U.S. Patent No. 6,132,072 to Turnbull et al.
1058	U.S. Patent No. 5,754,217 to Allen
1059	U.S. Patent No. 6,195,136 to Handschy et al.
1060	*Intentionally Left Blank*
1061	*Intentionally Left Blank*
1062	U.S. Patent No. 4,907,044 to Schellhorn et al.
1063	Leighty, et al., "Developing Technologies for Army Autonomous Land Vehicles (U)," Army Engineer Topographic Labs, Fort Belvoir, October 1985 (accessible online at https://apps.dtic.mil/sti/tr/pdf/ADA187972.pdf, last accessed October 30, 2023)
1064	Lowrie, et al., "The Autonomous Land Vehicle (ALV) Preliminary Road-Following Demonstration," Proceedings of SPIE, Vol. 579 Intelligent Robot and Computer Vision, 1985 (accessible at https://home.ttic.edu/~mturk/pubs/ALVpreliminary-SPIE1985.pdf, last accessed October 30, 2023)
1065	Surface Vehicle Recommended Practice, SAE International,

Exhibit #	Description
	J1383, May 2018
1066	Standard No. 108; Lamps, reflective devices, and associated equipment, 49 C.F.R. § 571.108 (November 3, 2023)
1067	Terminology: Motor Vehicle Lighting, SAE J387, November 1987
1068	"The International System of Units (SI)," Bureau International des Poids et Mesures, 7th Edition (1998) (Excerpt)
1069	Surface Vehicle Standard: Color Specification, SAE International, J578, February 2019
1070	Second Declaration of Matthew A. Turk, Ph.D. in IPR2023-00315 regarding U.S. Patent No. 9,955,551
1071	Complete copy of "The International System of Units (SI)," Bureau International des Poids et Mesures, 7th Edition (1998) (EX1068) (*served not filed*)
1072	Petitioner's Demonstratives for Oral Argument

Respectfully submitted,

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e))

I certify that the above-captioned **PETITIONER VOLKSWAGEN GROUP OF AMERICA, INC.'S UPDATED EXHIBIT LIST** and **EXHIBIT 1072** were served in their entireties on April 12, 2024, upon the following parties via electronic mail:

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