

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.
Petitioner

v.

CARUCEL INVESTMENTS L.P.
Patent Owner

Case IPR2019-01102
Patent 7,848,701

PETITIONER'S UPDATED EXHIBIT LIST

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Petitioner submits this Exhibit List to accompany submission of Exhibit

1049, Petitioner's Oral Hearing Demonstratives.

PETITIONER'S EXHIBIT LIST

| <i>Exhibit</i> | <i>Description</i> |
|-----------------------|--|
| 1001 | U.S. Patent No. 7,848,701 B2 to Gavrilovich ("the '701 patent") |
| 1002 | Prosecution File History of U.S. Patent No. 7,848,701 ("701 Prosecution History") |
| 1003 | Declaration of Mr. Denning in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 7,848,701 ("Denning Dec.") |
| 1004 | Mr. Denning's Curriculum Vitae |
| 1005 | U.S. Patent No. 5,276,686 to Ito ("Ito") |
| 1006 | U.S. Patent No. 5,504,786 to Gardner ("Gardner") |
| 1007 | U.S. Patent No. 5,109,390 to Gilhousen et al. ("Gilhousen390") |
| 1008 | U.S. Patent No. 4,001,692 to Fenwick et al. (Fenwick) |
| 1009 | U.S. Patent No. 5,559,865 to Gilhousen ("Gilhousen865") |
| 1010 | George Calhoun, <i>Digital Cellular Radio</i> , Artech House, Inc., 1988 ("Calhoun") |
| 1011 | W.R. Young et al., "Advanced Mobile Phone Service: Introduction, Background, and Objectives," <i>The Bell System Technical Journal</i> , vol. 58, no. 1, Jan. 1979; pp. 1-14. (accessible at https://archive.org/details/bstj58-1-1) ("Young") |
| 1012 | V.H. Mac Donald et al., "Advanced Mobile Phone Service: The Cellular Concept," <i>The Bell System Technical Journal</i> , vol. 58, no. 1, Jan. 1979; pp. 15-41. (accessible at https://archive.org/details/bstj58-1-15) ("Donald") |
| 1013 | John Scourias, "Overview of the Global System for Mobile Communications," May 19, 1995. ("Scourias") |
| 1014 | "Advanced Communications Project, Technology Reference Document," VisiCom Laboratories Inc., September 1993. ("VisiCom") |

| <i>Exhibit</i> | <i>Description</i> |
|-----------------------|--|
| 1015 | <i>Law Enforcement News</i> , vol. V, no. 20, Nov. 26, 1979. (accessible at https://archive.org/details/lawenforcementne20john_1/page/n15) (“News”) |
| 1016 | Excerpts from <i>Mobile Radio Technology</i> , vol. 6, no. 8, August 1988 (accessible at https://archive.org/details/MRT08August1988?q=mobile+extender) (“Standard”) |
| 1017 | U.S. Patent No. 5,504,935 to Vercauteren (“Vercauteren”) |
| 1018 | A.S. Acampora and J. H. Winters, “System Applications for Wireless Indoor Communications,” <i>IEEE Communications magazine</i> , vol. 25, no. 5, August 1987; pp. 11-20. (“Acampora”) |
| 1019 | T. O. Mottl, “Dual-Polarized Channel Outages During Multipath Fading,” <i>The Bell System Technical Journal</i> , vol. 56, no. 5, May-June 1977; pp. 675-701. (accessible at https://archive.org/details/bstj56-5-675) (“Mottl”) |
| 1020 | Jack Salz, and Jack H. Winters, “Effect of Fading Correlation on Adaptive Arrays in Digital Mobile Radio,” <i>IEEE transactions on Vehicular Technology</i> , vol. 43, no. 4, Nov. 1994; pp. 1049-1057. (“Salz”) |
| 1021 | U.S. Patent No. 5,481,533 to Honig et al. (“Honig”) |
| 1022 | U.S. Patent No. 7,221,904 to Gavrilovich (“the ’904 patent”) |
| 1023 | Prosecution File History of U.S. Patent No. 7,221,904 (“’904 Prosecution History”) |
| 1024 | U.S. Patent No. 5,566,209 to Forssén et al. (“Forssén”) |
| 1025 | U.S. Patent No. 5,345,467 to Lomp et al. (“Lomp”) |
| 1026 | U.S. Patent No. 6,393,281 to Capone et al. (“Capone”) |
| 1027 | U.S. Patent No. 5,434,853 to Hemmady et al. (“Hemmady”) |
| 1028 | U.S. Patent No. 5,267,261 to Blakeney, II et al. (“Blakeney”) |
| 1029 | U.S. Patent No. 5,101,501 to Gilhousen et al. (“Gilhousen501”) |
| 1030 | U.S. Patent No. 4,539,706 to Mears et al. (“Mears”) |
| 1031 | U.S. Patent No. 5,509,028 to Marque-Pucheu (“Marque-Pucheu”) |
| 1032 | U.S. Patent No. 4,675,863 to Paneth et al. (“Paneth”) |

| <i>Exhibit</i> | <i>Description</i> |
|-----------------------|--|
| 1033 | Excerpts from Webster's New World Dictionary, 3 rd College Edition, Simon & Schuster, 1993. ("Webster") |
| 1034 | Declaration of Scott A. Denning in Support of Petitioner's Reply to Patent Owner's Response ("Denning Reply Decl.") |
| 1035 | Declaration of Mark Lanning in Support of Defendants' Responsive Claim Construction Brief, <i>Barkan Wireless IP Holdings v. Samsung Elecs. Co. Ltd.</i> , Case No. 2:18-cv-00028 (E.D. Tex.), filed December 21, 2018. ("Lanning Barkan Decl.") |
| 1036 | Definitions of "automotive," "vehicle," and "traffic," <i>Oxford Desk Dictionary</i> , Oxford University Press, 1995; pp. 38, 611, and 640. ("Oxford Desk Dictionary") |
| 1037 | <i>Cessna Model 152 Information Manual</i> , Cessna Aircraft Company, July 1, 1979. ("Cessna") |
| 1038 | "Digital Cellular Land Mobile Telecommunication Systems," Rec. ITU-R M.1073-1, ITU Radiocommunication Assembly, 1994-1997. ("ITU") |
| 1039 | Transcript of the Deposition of Mark R. Lanning, June 2, 2020. |
| 1040 | Transcript of the Deposition of Mark R. Lanning, June 3, 2020 ("Denning Depo. Tr.") |
| 1041 | Transcript of the Deposition of Mark R. Lanning, June 4, 2020 ("Denning Depo. Tr.") |
| 1042 | Transcript of the Deposition of Mark R. Lanning, June 5, 2020 ("Denning Depo. Tr.") |
| 1043 | U.S. Patent No. 5,621,784 to Tiedemann, et al. ("Tiedemann784") |
| 1044 | U.S. Patent No. 6,292,651 to Dapper, et al. ("Dapper") |
| 1045 | Runway Safety: A Best Practices Guide to Operations and Communications, Federal Aviation Administration ("FAA Runway Safety") |
| 1046 | U.S. Patent No. 5,289,527 to Tiedemann, Jr., et al. ("Tiedemann527") |
| 1047 | Pyndiah, R., et al., "Performance of Block Turbo Coded 16-QAM and 64-QAM Modulations," <i>Proceedings of GLOBECOM '95</i> , Vol. 2, November 14-16, 1995; pp. 1039-1043. ("Pyndiah") |

| <i>Exhibit</i> | <i>Description</i> |
|-----------------------|---|
| 1048 | Jakubowski, R. J., “A New Generation of High-Power Cellular Repeaters,” <i>40th IEEE Conference on Vehicular Technology</i> , May 6-9, 1990; pp. 24-28. (“Jakubowski”) |
| 1049 | Petitioner’s Oral Hearing Demonstratives |

Respectfully Submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Ryan C. Richardson/

Ryan C. Richardson (Reg. No. 67,254)
Attorney for Petitioner
Volkswagen Group of America, Inc.

Date: August 24, 2020

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

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

The undersigned hereby certifies that on August 24, 2020, true and correct copies of the foregoing **PETITIONER'S UPDATED EXHIBIT LIST** and **EXHIBIT 1049** were served in their entireties on the following parties via electronic mail:

R. Scott Rhoades (Lead Counsel) srhoades@wriplaw.com
Sanford E. Warren (Back-up Counsel) swarren@wriplaw.com
Elvin E. Smith (Back-up Counsel) esmith@eeslaw.com
Charles D. Gavrilovich (Back-up Counsel) chuck@gdllawfirm.com

Respectfully Submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Ryan C. Richardson/

Ryan C. Richardson (Reg. No. 67,254)
Attorney for Petitioner
Volkswagen Group of America, Inc.

Date: August 24, 2020

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600