

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.,
FORD MOTOR COMPANY, GENERAL MOTORS LLC,
NISSAN NORTH AMERICA, INC., TESLA, INC., and
AMERICAN HONDA MOTOR CO., INC.,¹
Petitioner

v.

NEO WIRELESS, LLC,
Patent Owner

Case IPR2022-01539
U.S. Patent No. 10,965,512

**DECLARATION OF DR. PAUL MIN IN SUPPORT OF PETITIONER'S
REPLY**

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¹ Ford Motor Company filed a motion for joinder and a petition in IPR2023-00764, and General Motors LLC, Nissan North America, Inc., Tesla, Inc., and American Honda Motor Co., Inc., filed their own motion for joinder and petition in IPR2023-00961. Both motions were granted, and, therefore, Ford Motor Company, General Motors LLC, Nissan North America, Inc., Tesla, Inc., and American Honda Motor Co., Inc., have been joined as petitioners in this proceeding.

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PETITIONER'S UPDATED EXHIBIT LIST

| Exhibit No. | Description |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1001 | U.S. Patent No. 10,965,512 to Li <i>et al.</i> (“’512 patent”) |
| 1002 | ’512 Patent Prosecution History |
| 1003 | Declaration of Dr. Paul Min |
| 1004 | International Patent Publication No. WO2004/049618 to Kim <i>et al.</i> (“Kim”) |
| 1005 | U.S. Patent No. 7,120,395 to Tong <i>et al.</i> (“Tong”) |
| 1006 | U.S. Patent Application Pub. No. 2004/0179627 to Ketchum <i>et al.</i> (“Ketchum”) |
| 1007 | U.S. Patent Application Pub. No. 2002/0163879 to Li <i>et al.</i> (“Li”) |
| 1008 | U.S. Patent No. 7,248,559 to Ma <i>et al.</i> (“Ma ’559”) |
| 1009 | Tufvesson, <i>et al.</i> , <i>Pilot Assisted Channel Estimation For OFDM in Mobile Cellular Systems</i> , IEEE 47th Vehicular Technology Conference (1997) |
| 1010 | U.S. Patent No. 7,826,471 to Wilson <i>et al.</i> (“Wilson”) |
| 1011 | U.S. Patent No. 7,664,533 to Logothetis <i>et al.</i> (“Logothetis”) |
| 1012 | U.S. Patent No. 7,054,664 to Nagaraj (“Nagaraj”) |
| 1013 | International Patent Application No. WO 2004/056022 to Lee <i>et al.</i> (“Lee”) |
| 1014 | U.S. Patent No. 7,551,546 to Ma (“Ma ’546”) |
| 1015 | Anderson, <i>Fixed Broadband Wireless System Design</i> , Wiley (2003) (excerpts) |
| 1016 | U.S. Patent No. 7,852,746 to Jalali (“Jalali”). |
| 1017 | U.S. Patent Application Pub. No. 2004/0131007 to Smee <i>et al.</i> (“Smee”) |
| 1018 | U.S. Patent No. 7,650,152 to Li <i>et al.</i> (“Li ’152”). |
| 1019 | U.S. Patent Application Pub. No. 2004/0190598 to Seki <i>et al.</i> (“Seki”). |

| Exhibit No. | Description |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1020 | Li, “A Novel Broadband Wireless OFDMA Scheme for Downlink in Cellular Communications,” Samsung Advanced Institute of Technology (IEEE) (2003) (“Li-Samsung”) |
| 1021 | Hara <i>et al.</i> , “Multicarrier Techniques for 4G Mobile Communications,” Artech House (2003) (excerpts) (“Hara”) |
| 1022 | U.S. Patent Application Pub. No. 2004/0228270 to Chen <i>et al.</i> (“Chen”) |
| 1023 | Van Nee <i>et al.</i> , “OFDM for Wireless Multimedia Communications,” Artech House (2000) (“Van Nee”) (excerpts) |
| 1024 | Bahai <i>et al.</i> , “Multi-Carrier Communications Theory and Applications of OFDM,” Springer Science (2004) (excerpts) (“Bahai”) |
| 1025 | U.S. Patent No. 7,039,001 to Krishnan <i>et al.</i> (Krishnan”) |
| 1026 | U.S. Patent No. 6,992,621 to Casas <i>et al.</i> (“Casas”) |
| 1027 | U.S. Patent No. 5,596,329 to Searle <i>et al.</i> (“Searle”) |
| 1028 | U.S. Patent Application Pub. No. 2005/0075125 to Bada <i>et al.</i> (“Bada”). |
| 1029 | <i>Curriculum Vitae</i> of Dr. Paul Min |
| 1030 | U.S. Provisional Patent Application No. 60/421,309 to Walton <i>et al.</i> (“’309 Provisional”) |
| 1031 | U.S. Patent No. 7,012,882 to Wang <i>et al.</i> (“Wang”) |
| 1032 | Transfer Order, <i>In re: Neo Wireless, LLC, Patent Litigation</i> , Case MDL No. 3034, issued June 14, 2022 (ECF No. 50) |
| 1033 | Docket Sheet, <i>Neo Wireless, LLC v. Volkswagen Group of America, Inc.</i> , Case No. 2:22-cv-11404 (E.D. Mich.) |
| 1034 | United States District Courts – National Judicial Caseload Profile, June 2022 |
| 1035 | U.S. Patent No. 8,934,473 to Li <i>et al.</i> |
| 1036 | U.S. Patent No. 8,432,891 to Li <i>et al.</i> |
| 1037 | U.S. Patent No. 11,388,034 to Li <i>et al.</i> |

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