SHORT RESUME
M. Ehsani

M. Ehsani received the B.S. and M.S. degrees from the University of Texas at Austin in 1973 and 1974, respectively, and the Ph.D. degree from the University of Wisconsin-Madison in 1981, all in electrical engineering.

From 1974 to 1977 he was with the Fusion Research Center, University of Texas, as a Research Engineer. From 1977 to 1981 he was with Argonne National Laboratory, Argonne, Illinois, as a Resident Research Associate, while simultaneously doing the doctoral work at the University of Wisconsin-Madison in energy systems and control systems. Since 1981 he has been at Texas A&M University, College Station, Texas where he is now a Professor of electrical engineering and Director of Advanced Vehicle Systems Research Program and the Power Electronics and Motor Drives Laboratory. He is the author of over 500 publications in pulsed-power supplies, high-voltage engineering, power electronics, motor drives, and advanced vehicle systems and is the recipient of the Prize Paper Awards in Static Power Converters and motor drives at the IEEE-Industry Applications Society 1985, 1987, and 1992 Annual Meetings, as well as over 150 other honors and recognitions. In 1984 he was named the Outstanding Young Engineer of the Year by the Brazos chapter of Texas Society of Professional Engineers. In 1992, he was named the Halliburton Professor in the College of Engineering at A&M. In 1994, he was also named the Dresser Industries Professor in the same college. In 2001 he was selected for Ruth & William Neely/ Dow Chemical Faculty Fellow of the College of Engineering for 2001-2002, for "contributions to the Engineering Program at Texas A&M, including classroom instruction, scholarly activities, and professional service". In 2003 he was selected for BP Amoco Faculty Award for Teaching Excellence in the College of Engineering. He was also selected for the IEEE Vehicular Society 2001 Avant Garde Award for "Contributions to the theory and design of hybrid electric vehicles". In 2003 he was selected for IEEE Undergraduate Teaching Award "For outstanding contributions to advanced curriculum development and teaching of power electronics and drives." In 2004 he was elected to the Robert M. Kennedy endowed Chair in Electrical Engineering at Texas A&M University. In 2005 he was elected as the Fellow of Society of Automotive Engineers (SAE). He is the co-author of 20 books on power electronics, motor drives and advanced vehicle systems, including Vehicular Electric Power Systems, Marcel Dekker, Inc. 2003 and "Modern Electric Hybrid Vehicles and Fuel Cell Vehicles – Fundamentals, Theory, and Design", CRC Press, 2004. In addition to being the co-author of over 500 publications, and 23 books in the above fields, he has over 30 granted or pending US and EU patents. He has also been consultant to over 60 companies, US government agencies and internationals organizations. His current research work is in energy systems, power electronics, motor drives, hybrid vehicles and their control systems, and sustainable energy engineering.

Dr. Ehsani has been a member of IEEE Power Electronics Society (PELS) AdCom, past Chairman of PELS Educational Affairs Committee, past Chairman of IEEE-IAS Industrial Power Converter Committee and past chairman of the IEEE Myron Zucker Student-Faculty Grant program. He was the General Chair of IEEE Power Electronics Specialist Conference for 1990. He is the founder of IEEE Power and Propulsion Conference, the founding chairman of the IEEE VTS Vehicle Power and Propulsion and chairman of Convergence Fellowship Committees. In 2002 he was elected to the Board of Governors of VTS. He has also served on the editorial board of several technical journals and was the associate editor of IEEE Transactions on Industrial Electronics and IEEE Transactions on Vehicular Technology. He is a Life Fellow of IEEE, a past IEEE Industrial Electronics Society and Vehicular Technology Society Distinguished Speaker, IEEE Industry Applications Society and Power Engineering Society Distinguished Lecturer. He is also a registered professional engineer in the State of Texas.

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BIOGRAPHICAL DATA

- Ehsani, Mehrdad (Mark)
- Professor, Electrical Engineering
- Birth date: 10/9/50
- Citizenship: U. S.
- Marital Status: Married
- Number of Children: Three
- Last Security Clearance: Secret

ADDRESS

Work: Texas A&M University
Department of Electrical Engineering
College Station, Texas 77843

PROFESSIONAL INTERESTS

- Electronics
- Solid State Power Systems
- Power Electronics
- Motor Drives
- Specialized Power Systems
- Control Systems
- Energy Storage Systems
- High Voltage Direct Current (HVDC) Power Transmission
- Applications of Microcomputers to Power Control
- Pulsed Power Systems
- Electric Hybrid Vehicles
- High Voltage Engineering
- Electrical Failures and Hazards
- Advanced Vehicle Power and Propulsion Systems
- Novel Electromagnetic Machines
- Sustainable Energy and Transportation

EDUCATION

- Ph. D., Electrical Engineering, University of Wisconsin, Madison, 1981
- M. S., Electrical Engineering, University of Texas, Austin, 1974
- B. S., Electrical Engineering, University of Texas, Austin, 1973

EXPERIENCE

- **Educational**

1. Assistant Professor, Electrical Engineering, Texas A&M University, August 1981-1987

2. Associate Professor of Electrical Engineering, Texas A&M University, September 1987-1992

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3. Professor, Electrical Engineering, Texas A&M University, 1992-present

4. Director, Texas Applied Power Electronics Center, Department of Electrical Engineering, Texas A&M University, 1982-present

5. Director of Advanced Vehicle Systems Research Program, College of Engineering, Texas A&M University, 1992-present

- **Industrial**

1. Research Engineer, Fusion Research Center, Austin, Texas, 1974-1977

2. Research Engineer, Argonne National Laboratory, 1977-1981

3. Consultant to over 65 U.S. and International Companies and Government Agencies

PROFESSIONAL SOCIETY MEMBERSHIPS

1. Institute of Electrical and Electronics Engineers (IEEE), since 1970
2. IEEE Industry Applications Society (IAS)
3. IEEE Industrial Electronics Society (IES)
4. IEEE Power Electronics Society (PELS)
5. IEEE Vehicular Technology Society (VTS)
6. Society of Automotive Engineers (SAE)
7. Member, American Energy Society
8. Member, American Association for Advancement of Science (AAAS)
9. Registered Professional Engineer, Texas No. 57178

HONORS/AWARDS

1. Life Fellow of IEEE

2. Fellow of SAE

2. Outstanding Young Engineer of the year, 1984, Brazos Chapter, Texas Society of Professional Engineers.

3. Prize Paper First Place Award in Power Electronics, IEEE Industry Applications Society, 1985 and 1987 Annual Meetings.

4. Engineering Excellence Award ($24,000), College of Engineering, Texas A&M University, 1986 and 1987.

5. Chief Editor for Power Systems Series, CRC Press, 1989.

6. General Chair, IEEE-PELS Power Electronics Specialists Conference, 1990.

7. Member of Editorial Board of Electric Machines and Power Systems Journal.

8. IEEE-Industrial Electronics Society Distinguished Speaker.

9. Plenary Session Author in IEEE Power Electronics Specialists Conference for 1990 and 1991.

10. Invited Author at IEEE Applied Power Electronics Conference and Exposition, Boston, February 1992.

11. Invited Author at 1992 International Symposium on Power Electronics, Seoul, Korea, April 1992.

12. Invited Author at International Aegean Conference on Electrical Machines and Power Electronics, Kusadasi, Turkey, May 1992.

13. Prize Paper Third Place Award in Motor Drives, IEEE Industry Applications Society 1992 Annual Meeting.

14. Invited Author and Panelist at 2nd International Power Electronics Congress, Cuernavaca, Mexico, August 1993.

15. IEEE Industry Applications Society Distinguished Speaker and Invited Author at II Brazilian Power Electronics Conference, Umberlandia, Brazil, December 1993.

16. Plenary Session Author in IEEE Power Electronics Specialists Conference for 1993.

17. Winner of IEEE IAS 1993 Annual Meeting Prize Paper Award from the Motor Drives Committee.

18. Invited Author at Southcon Technical Conference, Orlando Florida, March 1994.

19. Member of the Scientific Committee of the 1st International Power Electronics and Motion Control Conference, Beijing, China, June 1994.

20. Invited Author in 1st International Power Electronics and Motion Control Conference, Beijing, China, June 1994.

21. Member of the Advisory Committee of Second International Workshop on "The Future of Electronic Power Processing and Conversion," Berg-en-dal, South Africa, August 1994.

22. General Chairman of 3rd International Power Electronics Congress, Puebla, Mexico, August 1994.

23. Listed in Who's Who in America, 49th through current Editions.

24. Listed in American Men and Women of Science.

25. Listed in Who is Who in the South and Southwest.

26. Invited Short Course in Tel Aviv University, Israel, May 1995.

27. Invited Paper in International Aegean Conference on Electrical Machines and Power Electronics, Kusadasi, Turkey, June 1995.

28. Member of Steering Committee, World Congress of Industry Leaders and Educators, Fair of Engineering Innovations and UNESCO-UNISPAR Seminar, sponsored by Jozef Zych, Speaker of Polish Parliament, October 1996.

29. Invited Short Course on "Sensorless variable reluctance machines," IEEE Industry Applications society 1996 Annual Meetings, October 1996.

30. Member of Steering Committee of the 1st International Congress in Israel on Energy, Power & Motion Control, Tel-Aviv, Israel, November 1996.

31. Honorary Professor of Electrical Engineering, The University of Hong Kong, 1996.

32. Blue Ribbon University Lecture at US Department of Transportation, Research and Special Programs Administration, "Electrically Peaking Hybrid (ELPH) Vehicles: A Sustainable Technology for the 21st Century," Washington, DC, April 25, 1997.

33. Mahdavi, A. Emadi, M. D. Bellar and M. Ehsani, "Analysis of Power Electronic Converters Using the Generalized State Space Averaging Approach," Invited Paper for Special Issue of IEEE Transactions on Circuits and Systems on Simulation, Theory and Design of Switched Analog Networks, IEEE Trans. on Circuit s and Systems, vol. 44, no. 8, August 1997.

34. Invited Paper on "Soft Switching Motor Drive Inverters for Electric and Hybrid Vehicles," in IEEE Industrial Electronics Annual Meeting, IECON'97, New Orleans, Louisiana, November 1997.

35. Invited Panelist on "Trends in Power Electronics and Motor Drives," Invited Paper in IEEE Industrial Electronics Annual Meeting, IECON'97, New Orleans, Louisiana, November 1997.

36. Elected IEEE Industry Applications Society Distinguished Lecturer, 1998-99.

37. Invited Lecture, entitled "Modern Motor Drives for Industrial and Product Applications," IEEE Chapter Meeting, Little Rock Arkansas, January 22, 1998.

38. National Science Foundation Site Reviewer for NSF Center Proposal, Blacksburg, Virginia, Jan. 19-22, 1998.

39. Invited Speaker, IEEE Power Engineering Society Section Meeting, Columbus, Ohio, March 31, 1998.

40. Key Note Speaker, Southeast Michigan Section Spring Meeting, April 2, 1998, Dearborn, Michigan.

41. Invited Key Note Speaker on "State of The Art in Power Electronics and Motor Drives," Vicenza Trade Fair and Workshop, Vicenza, Italy, May 15, 1998.

42. Invited Seminar at Toshiba Small Motor Development Center, "Advanced Switched Reluctance Motor Drives for Industrial and Traction Applications," July 14, 1998.

43. M. Ehsani, R. Velayutham, S. Gopalakrishnan, and B. Fahimi, "Sensorless Control of Switched Reluctance Motor: a Technology Ready for Applications," Invited Paper, International Conference on Electrical Machines, Istanbul, Turkey, September 2-4, 1998.

44. Member of Program Committee, International Conference on Electronics, October 1998, Oran, Algeria.

45. Invited Paper, entitled "Switched Reluctance Motor Drives: State of the Art and Applications," 1998 Special Issue of Indian Academy of Sciences.

46. Member International Steering Committee, The IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives, Gijon, Spain, September, 1999.

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47. Organizer and Plenary Paper Presenter for Invited Session at 1999 International al Federation of Automatic Control (IFAC) World Congress in Beijing, China: Advances in Rear-Time DSP Control of Stiff Systems.

48. Organizer Presenter for Tutorial Session at 1999 American Control Conference (ACC) in San Diego, California: Advances in Real-Time Control of Motor Drive Systems.

49. Listed in Dictionary of International Biography, Cambridge, England, 27th Edition, 1999.

50. Member of International Steering Committee of IEEE International Power Electronics Congress, Acapulco, Mexico, 2000.

51. Member of Technical Program Committee of Forth International Power Electronics Conference (IPEC-Tokyo 2000).

52. Member of Technical Program Committee of 3rd International Power Electronics and Motion Control Conference (IPEMC, 2000).

53. Appointed as the Distinguished Lecturer of IEEE Power Engineering Society, 1999-2000.

54. Member of International Steering Committee of the 1999 IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives, September 1-3, Spain.

55. Invited Seminar to the Local Chapter of IEEE in Istanbul, Turkey on "State of the Art in Power Electronics and Motor Drives," August 27, 1998.

56. Invited Seminar to the Local Chapter of IEEE in Paris, France on "An Over View and State of the Art in Hybrid Electric Vehicles," September 23, 1999.

57. Invited Seminar to the Local Chapter of IEEE in Heidelburg, Germany on "State of the Art and Recent Applications of Switched Reluctance Motor Drives," November 19, 1999.

58. Invited Seminar at the Swiss Federal Institute of Technology on "State of the Art on Sensorless Switched Reluctance Motors," Zurich, Switzerland, May 9, 2000.

59. Invited Short Course at Tel Aviv University on "Hybrid Electric Vehicles," Tel Aviv, Israel, May 23-25, 2000.

60. Invited Seminar at Techneon University on "State of the Art on Electric and Hybrid Vehicles," Haifa, Israel, May 29, 2000.

61. Invited Presentation in First Snead Research Institute Workshop on Fuel Cell Hybrid Track Vehicles, August 1-3, 2000, Georgetown, Texas.

62. Advisor to the Board of Directors of Snead Research Institute.

63. Listed in International Who's Who of Professionals, 2001.

64. Member of International Steering Committee of VII IEEE Power Electronics Congress, Acapulco, Mexico, October 2000.

65. Reference Publications Listed in Infography Publishers' Fields Of Knowledge.com, in Switched Reluctance Motor Drives, Solid State Power Systems, Brushless DC Motor Drives, Hybrid Electric Vehicles, and Synchronous Reluctance Motor Drives.

66. Appointed as a Member of Committee on Next Generation Materials and Processes for Advanced Hybrid Power Systems, National Materials Advisory Board, National Research Council, National Academy of Engineering, September 2000.

67. Member of International Steering Committee of CIEP'02, Guadalajara, Mexico.

68. Panelist on hybrid electric vehicles, National Academy of Engineering Mini-Symposium, March 19, 2001, College Station, Texas.

69. Selected for Ruth & William Neely/ Dow Chemical Faculty Fellow of the College of Engineering for 2001-2002, for "contributions to the Engineering Program at Texas A&M, including classroom instruction, scholarly activities, and professional service".

70. Member of Steering Committee of International Aegean Conference on Electrical Machines and Power Electronics, Kusadasi, Turkey, June 2001.

71. Invited paper at the SAE *2001 Future Transportation Technology Conference*, Costa Mesa, CA, August 2001, "42V Automotive Power Systems".

72. Winner of 2001 Avant Garde Award from IEEE Vehicular Technology Conference for "Contributions to the Theory and Design of Hybrid Electric Vehicles."

73. Listed in Cambridge International Biographical Center, Who's Who in the 21st Century.

74. Invited external Ph. D. examiner on hybrid vehicle technology at the University of Vallenciennes, France, Jan. 4, 2002.

75. Guest Editor, Special Issue on Switched Reluctacne Motor Drives, IEEE Transactions on Industrial Electronics, Vol. 49, No. 1, Feb. 2002.

76. Winner of 2003 IEEE Undergraduate Teaching Award, with the following citation: "For outstanding contributions to advanced curriculum development and teaching of power electronics and drives."

77. Member of International Steering Committee of 2003 International Power Electronics and Motion Control Conference, Xi'an, China.

78. Elected Distinguished Speaker of IEEE Vehicular Technology Society, 2003-2004.

79. Winner of Texas A&M Technology Licensing Office "Spirit of Innovation Award for the 2000th Disclosure", 2003.

80. Listed in the International Biographical Center of Cambridge, England Outstanding People of 20th Century.

81. Selected as an International Educator of the Year for 2003 by International Biographical Center of Cambridge, England.

82. Appointed to Research Visionary Board, Chief Technology Office, Motorola Corporation, 2003.

83. Invited for Distinguished Lecture in the Department of and Computer Engineering Illinois Institute of Technology, Chicago, Ill. August 29, 2003.

84. Selected for Texas A&M College of Engineering BP Amoco Faculty Award for Teaching Excellence, 2003.

85. Associate Editor of International Journal of Electrical Engineering in Transportation

86. "Integrated Biofuel-Vehicle System", Key Note address given at the opening of the 2004 IEEE-VTS Vehicle Power and Propulsion Symposium in Paris, France, October 4th, 2004

87. Elected to the Robert M. Kennedy endowed Chair of Electrical Engineering in 2004.

88. Served on the National Research Council Review Committee for NASA LEAP Program proposals, 2005.

89. Elected as Fellow of Society of Automotive Engineers (SAE).

90. Served on Motorola Corporation Research Visionary Board, 2005.

91. Who's Who in Finance and Business
92. Who's Who in America
93. Who's Who in American Education
94. Who's Who in Science and Engineering
95. Who's Who in the South and Southwest
96. Who's Who in the World
97. Who's Who in the World - 2015, 32nd Edition (pub. 2014);
98. Member of international steering committee, 5th International Power Electronics and Motion Control Conference (IPEMC2006), shanghai,China , August of 2006.

99. Key Note Speech Presenter, IEEE Vehicle Power and Propulsion Conference/ SAE Future Transportation Technology Conference Joint session, "Integrated Biofuel Vehicle Systems," September 7, 2005, Chicago, Illinois.

100. Member of National Research Council Panel for Decadal Survey of Civil Aeronautics, 2005-2006.

101. Key Note Speaker, ELECO 2005, "A Vision of Sustainable Vehicles and Fuel Technologies," Istanbul, Turkey.

102. Key Note Presentation, IEEE Vehicle Power and Propulsion Conference, VPPC, " A Vision of Renewable Energy and Sustainable Transportation,' Windsor, England, September, 2006.

103. Member of the Advisory Committee and Key Note Speaker of Automotive Research Association of India Electric and Hybrid Electric Vehicles Conference, December 18-20, 2006, Pune, India.

104. Member of Italian Ministry for University and Research International Review Panel.

105. Member of Hong Kong Scientific and Engineering Review Panel.

106. Recipient of International Biographical Center, Cambridge, England, 21st Century Award for Achievement.

107. Listed in Who's Who in America, 61st Edition, 2007.

108. Member of Advisory Board of Automotive X Prize Foundation, Inc.

109. Member of the Steering Committee of International Conference on Electrical and Electronics Engineering, ELECO'2006 & ELECO'2007.

110. 2007 Innovation Award, Texas A&M Technology Lisencieng Office.

111. Key Note Speaker, MIT Automotive Consortium meeting, Seatle, WA, April, 2007.

112. Key Note Speaker, IEEE Vehicle Power and Propulsion Conference, VPPC07, "Sustainable Fuel and Vehicle Technologies: Update on Progress & Problems," Arlington, Texas, September 10-12, 2007.

113. Key Note Speaker, IEEE Vehicle Power and Propulsion Conference, VPPC 08, " Issues on Sustainable Energy and Transportation," Harbin, China, September 3, 2008.

114. Member of Steering Committee, 6th IEEE International Power Electronics and Motion Control Conference (IPEMC 2009), Wuhan, China, during May 17-20, 2009.

115. Listed in Who's Who in Finance and Business.

116. IEEE Vehicular Technology Society 2008 VTS Outstanding Service Award.

117. Member, Automotive X PRIZE Development Advisory Board.

118. Key Note Speaker at IEEE Vehicle Power and Propulsion Conference, VPPC 09 " Sustainable Energy Engineering," Dearborn, Michigan, September 2009.

119. Invited short Course, Technological University of Panama, "Sustainable energy engineering,' June, 2010.

120. Winner of 2011 Texas A&M University System Patent and Innovation Award.

121. Inaugural ABB Distinguished Lecturer, North Carolina State University, March 2012.

122. Member of the organizing committee, Power Train Modeling and Control Conference, PMC2012, September 4-6, 2012.

123. Winner of Texas A&M University Office of Technology Commercialization Patent and Innovation 2012 Award.

124. Technical Advisor to the government panel on National Integrated Sustainable Power System of Pananam-2050.

125. Panelist: Aspen Clean Energy Round Table, June 4-6, 2012.

126. Member of Organizing Committee, TMC 2012 (Testing, Mapping and Calibration Conference) 4th to 6th of September 2012, University of Bradford, West Yorkshire, UK.

127. Key note speaker and Program Co-Chair, 2012 International Conference on Connected Vehicles & Expo (ICCVE 2012), December 2012, Beijing, China.

128. Key Note speaker at IEEE Green Technologies Conference, Denver, Colorado, April 4-5, 2013.

129. Invited Distinguished Lecture, “Sustainable Energy Engineering,” University of Colorado, Boulder, September 19, 2013.

130. Listed in "Who's Who in North American Education (2014-2015 Edition)."

131. Key note on “Sustainable Energy and Transportation Engineering” at IEEE Green Tech’14, Corpus Christi, Texas, April, 2014.

132. Keynote on “Sustainable Energy Engineering” at 3rd International Conference in Renewable Energy Research and Applications, Milwaukee, October 2014.

133. IEEE Vehicular Technology Distinguished Lecture “ Evolution of Electric Drivetrain,” McGill-IEEE Symposium on Advanced Electric Vehicle Drivetrains, November 14, 2014, Montreal, Canada.

134. Invited seminar at University of Texas at Austin, Energy Institute, “Engineering and Socio-economic aspects of sustainable energy,” January 22, 2015.

135. M. Ehsani, “Confluence of Fossil and Sustainable Energy Sources,” keynote at IEEE Green Tech’15, New Orleans, April, 2015.

136. Elected to IEEE Life Fellow, 2015.

137. IEEE Power Engineering Society Distinguished Lecture on sustainable energy, Austin, Texas chapter, February 23, 2016.

138. Invited keynote at 3rd Biennial International Conference on Powertrain Modelling and Control Testing, Mapping and Calibration, Loughborough University, UK, September 7, 2016.

139. Invited honorary lectures on “Electrification of Vehicles” at the Gordon Institute, Tel Aviv University, Israel, June 2017.

140. Guest Editor of IEEE Transactions on Energy Conversion Special Edition on “Emerging Electric Machines and Drives for Smart Energy Conversion,” 2017.

141. Invited IEEE Power Engineering Society Distinguished Speaker on “An Over View of High Voltage DC Power Transmission,” Austin, Texas, March 2018.

142. Invited IEEE Power Engineering Society Distinguished Speaker on “Engineering and Socio-Economic Aspects of Sustainable Energy and Transportation,” San Diego, California, April 2018.

143. Recipient of IEEE Vehicular Society Outstanding Contribution Recognition certificate, 2015-2018.

144. Honorary Lecture on “Engineering and Socio-Economic Aspects of Sustainable Energy and Transportation”, Texas A&M University, Kingsville, October, 2018.

145. Listed in Who’s Who in America, 2019 edition.

146. Best Paper Award, “A Review of the More Electric Aircraft Power Electronics,” Texas Power and Energy Conference (TPEC), College Station, Texas, February, 2019.

147. Invited keynote “ Engineering and Socio-Economic Aspects of Sustainable Energy and Transportation,” 2019 MIT Applied Energy Symposium, May 22-24, 2019.

148. Invited talk at the Central Texas Chapter of IEEE PES, IAS, IES on “Electric and Hybrid-Electric Vehicles – Similarities, Differences and Developments,” October 29, 2019.

149. Mehrdad "Mark" Ehsani, PhD, Presented with the Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who, March 2, 2020.

150. Elected for "Outstanding Faculty of the Year," by the faculty of Electrical and Computer Engineering Department, Texas A&M University, 2020-21.

151. TEES nominee for the Breakthrough Energy Fellows, a new initiative founded by Bill Gates, February 2021.

152. Invited Guest Editor, IEEE Proceedings Special Issue on Electric and Hybrid Electric Vehicle Technologies, published in June 2021.

153. Mehrdad Ehsani, et. al., "State of the Art and trends in Electric and Hybrid Electric Vehicles," invited paper to be published in IEEE Proceedings Special Issue on Electric and Hybrid Electric Vehicle Technologies, 2021.

154. Member, International Advisory Board of the 3rd International Conference on Smart Grid and Renewable Energy (SGRE 2022).

155. Invited presenter at "Proceedings of the IEEE Webinar on Electric and Hybrid Vehicles," Friday, July 30, 2021.

156. Invited member of Advisory Board of the '2nd IEEE International Symposium on Sustainable Energy, Signal Processing & Cyber Security (iSSSC 2022).

157. Keynote Presenter, The 14th Annual IEEE GreenTech Conference, March 30th - April 3rd 2022, Houston, TX.

158. "A Global Perspective on Sustainable Energy and Transportation," Wednesday, September 7, Keynote talk, Loughborough University, Institute for Advanced Study, UK, https://www.lboro.ac.uk/research/ias/events/2022/september/researchseminar-markehsani/

159. Visiting Fellow of the Institute of Advanced Studies, Loughborough University, UK, 2022.

160. Elected as IEEE Vehicular Technology Society Distinguished Lecturer for 2024-26.

161. Elected to Loughborough University Institute of Advanced Studies Resident Scholar, 2024

ACADEMIC CHAIRS

- Halliburton Professorship-1992.
- Dresser Industries Professorship-1994.
- Robert M. Kennedy endowed Chair of Electrical Engineering, since 2004.

SAMPLE SHORT COURSES

1. Invited Short Course offered by Electric Power Research Institute (EPRI), Power Electronic Applications Center (PEAC), June 1989.

2. Invited Short Course in IEEE Applied Power Electronics Conference Exposition, Dallas, March 1991: "Pulse Width Modulation: Fundamentals and Implementation."

3. Invited Short Course in IEEE Applied Power Electronics Conference Exposition, San Diego, March 1993: "Technology Simplification in Switched Reluctance Motor Drives."

4. Invited Short Course at Tel Aviv University, November 1993: "Super Conductive Magnet Power Supplies."

5. Invited Short Course in IEEE Applied Power Electronics Conference and Exposition, Orlando, Florida, February 1994: "High Power Soft Switched Converters."

6. Invited Short Course in IEEE Applied Power Electronics Conference and Exposition, Dallas, Texas, March 1995: "Electric Drives in Electric and Hybrid Vehicles."

7. Invited Short Course at GM Proving Grounds in Milford, MI and Mesa, AZ, September/October, 1995: "Electric Drives in Electric and Hybrid Vehicles."

8. Invited Short Course at LeTourneau, Longview, Texas and Texas Instruments, Dallas Texas, January 12 & 26, 1996: "Design and Control of Switched Reluctance Motor Drives."

9. Invited Short Course at IEEE Industry Applications Society 1996 Annual Meeting, San Diego, California, October 6, 1996: "Sensorless Variable Reluctance Motors."

10. Invited Short Course at Tel Aviv University, May 22-25, 2000: "Design and Simulation of Electric and Hybrid Electric Vehicles."

11. Invited Short Course at Hanyang University, Seoul, Korea, June 26, 2000: "State of the Art of Brushless DC Motor and Switched Reluctance Motor Drives."

12. Invited Short Course at LG Electronics Company, Seoul, Korea, June 27, 2000: "Sensorless Controls and Reduced Parts Converters for the Advanced BLDC and SRM Drives."

13. Invited Short Course at Hyundai Motor Company, Suwon, Korea, June 28, 2000: "Design and Control of Electric and Hybrid Electric Vehicles."

14. Invited Short Course at Korean Electromagnetic Research Institute (KERI), Changwon, Korea, June 29, 2000: "Design and Control of Switched Reluctance Motors and Electric and Hybrid Electric Vehicle"

15. Sensorless Brushless DC Motor Drives for Integrated in-line automotive Pump Applications, Short course given at EMP Corp. Escenaba, Michigan, August, 2004.

16. "Control of BLDC Machines with Improved Performance", U.S. Army Vetronics Institute 3rd Annual Winter Workshop, Jan 13, 2004, U.S. Army Tank-Automotive RD&E Center Warren, MI

17. "Control of the BLDC machine with improved performance", Short Course, June 2004, Tel Aviv University, Israel.
18. " Advanced Mobile Integrated Power System (AMPS)", Short Course, January 2005, US Army Tank Automotive Command (TACOM), Warren, Michigan.
19. " Vehicle Power systems", Short Course, January 2006, US Army Tank Automotive Command (TACOM), Warren, Michigan.
20. " Short Course on Hybrid Electric Vehicle", **TUBITAK Marmara Research Center**, TURKE, Dec. 2005.
21. IEEE Vehicular Technology Distinguished Lecture, Isreal Chapter, Tel Aviv, Dec. 2005.
22. " Short Cours on Advanced Controls for Brushless DC Motor Drivres," IEEE Applied Power Electroncis Conference, Dallas, Texas, March, 2006.

23. M. Ehsani, "Short Course on Sustainable Energy Engineering," University of Tel Aviv, December 2010, invited short course.

24. M. Ehsani "Short Course on Sustainable Energy and Transportation," Technical University of Panama, June 2010, invited short course.
25. Invited presenter at "Proceedings of the IEEE Webinar on Electric and Hybrid Vehicles," Friday, July 30, 2021.

PROFESSIONAL COMMITTEE MEMBERSHIPS (past or present)

- IEEE Power Electronics Society (PELS) Administrative Committee
- IEEE Industry Applications Society (IAS) Executive Committee.
- IEEE Myron Zucker Faculty-Student Grant Program Chairman.
- IEEE IAS Industrial Power Converter Committee (IPCC), Chairman.
- IEEE-PELS Meetings Committee Member.
- IEEE-IAS Industrial Drives Committee Member.
- IEEE IAS Education Committee Member.
- IEEE-PELS Power Electronics Specialists Conference Program Committee Member.
- IEEE 1994 Power Electronics Specialists Conference Topic Chairman in "Motor Drives"
- IEEE Power Electronics Society Energy Committee Chairman
- Editorial Board of Electric Machines and Power Systems Journal Member
- IEEE Power Electronics Society Chairman of Education Committee
- IEEE Power Electronics Society Intersociety Liaison
- IEEE Transactions on Industrial Electronics, Associate Editor
- IEEE Transactions on Vehicular Technology, past Associate Editor
- IEEE Vehicular Technology Society Chairman of Vehicle Power and Propulsion Committee
- Vehicular Technology Society Chairman of Convergence Fellowship Committee
- Member of IEEE Vehicular Technology Society Board of Governors
- Member of IEEE Vehicular Society Fellows Nominations Committee
- Chair of IEEE Vehicular Technology Society, Vehicles Committee

UNIVERSITY SERVICE

1. Member, Graduate Studies Committee, since 1982.

2. Member, Electrical Engineering Administrative Council, Hiring Committee, 1986.

3. Member, Doctor of Engineering Program Committee, Electrical Engineering Department, 1989.

4. Founding Member, Deans Committee on Engineering Scholars Program, College of Engineering, 1988, 1989, 1990, 1991.

5. Electric Power Institute (EPI) member.

6. Texas A&M Metermens School Lecturer, 1982-present.

7. Member, Department Awards Committee, 1992-present.

8. Chairman of the University Council of Principle Investigators, 1994-1995.

9. Member of Interdisciplinary Research Task Force, 1994.

10. Member of University Research Council Subcommittee on Conflict of Interest, 1994-1995.

11. Member of Departmental Awards Committee, 1995.

12. Member of Departmental Tenure and Promotion Committee, 1996- 1997.

13. Faculty Advisor to IEEE Student Chapter of Power and Power Electronics at Texas A&M University.

14. Member of Departmental Advisory Committee, 1999-2005.

26. Member Departmental Tenure and Promotion Committee, 2000-2002.

27. Member Departmental Distinguished Lecturer Selection Committee, 2003- 2005.

28. Member Departmental Tenure and Promotion Committee, 2008-present.

29. Chair of Department Awards commit 2011.

30. Departmental Representative at the Engineering Faculty Advisory Committee, EFAC, College of Engineering.

31. Member, Departmental Graduate and Admissions Committee.

32. Member of Departmental Awards Committee 2020-21.

33. Member of Departmental Chairs and Professorships Committee 2020-23.

34. Member of Departmental Invited Lecturers Committee 2023-2024

PUBLICATIONS

Books

1. Co-author: IEEE Guide for Self-Commutated Converters, ANSI/IEEE Std. 936, 1987.

2. Converter Circuits for Superconductive Magnetic Energy Storage, Co-Author: R. L. Kustom, Texas A&M University Press, 1988.

3. Contributor of Chapter on "Switched Reluctance Motor Drives" to Encyclopedia of Electrical and Electronics Engineering, John Wiley & Sons.

4. Contributor of Chapter on "Harmonic and Power Factor Control" to Encyclopedia of Electrical and Electronics Engineering, John Wiley & Sons.

5. Modern Electrical Drives, Co-Author: H. B. Ertan, et al., Klewar Academic Publishers, 2000, printed in the Netherlands.

6. Contributor of a chapter on "More Electric Aircraft" to CRC Handbook of Power Electronics, 2002.

7. Contributor to SAE book "Hybrid Electric Vehicles," SAE SP-1633, published in 2001.

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220. M. Ehsani, “Sustainable Energy Engineering,” Keynote at 3rd International Conference in Renewable Energy Research and Applications, Milwaukee, October 2014.

221. Farokhnia, Naeem ; Mohammad, Muneer ; Gatabi, Iman Rezanezhad ; Ehsani, Mehrdad "Unbalance, flicker, harmonic, voltage and reactive power compensation of the distribution grid using a universal STATCOM" 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE), 2014 , Page(s): 682 – 687.

222. M. Ehsani, “Confluence of Fossil and Sustainable Energy Sources,” keynote at IEEE Green Tech’15, New Orleans, April, 2015.

223. Shmilovitz, D.; Ozeri, S.; Ehsani, M.M., "A resonant LED driver with capacitive power transfer," in Applied Power Electronics Conference and Exposition (APEC), 2014 Twenty-Ninth Annual IEEE , vol., no., pp.1384-1387, 16-20 March 2014.

224. A. Abramovitz, I. Reichman, M. Ehsani, D. Shmilovitz, "Off line Capacitive Isolated QRLEDD" Power Electronics and Applications (EPE'15-ECCE Europe), 2015.

225. Al-Masri, H.; Alhuwaishel, F.; Alismail, F.; Sabeeh, S.; Kanakri, H.; Ehsani, M., "Application of gyrator concept to control and operation of boost converter," Proceedings of 2015 IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC), Rome, vol., no., pp.272-277, 10-13 June 2015

226. Al-Masri, Hussein; Ehsani, Mehrdad, "Feasibility investigation of a hybrid on-grid wind photovoltaic retrofitting system," in Industry Applications Society Annual Meeting, 2015 IEEE , vol., no., pp.1-7, 18-22 Oct. 2015.

227. H. M. K. Al-Masri and M. Ehsani, "Accurate wind turbine annual energy computation by advanced modeling," 2016 IEEE Industry Applications Society Annual Meeting, Portland, OR, 2016, pp. 1-6.

228. H. M. K. Al-Masri and M. Ehsani, "Impact of wind turbine modeling on a renewable energy system," 2016 North American Power Symposium (NAPS), Denver, CO, 2016, pp. 1-6.

229. H. M. Al-Masri, A. Abu-Errub, W. R. Ayyad and M. Ehsani, "On the PV module characteristics," 2016 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM), Anacapri, 2016, pp. 901-905.

230. A. Torkan and M. Ehsani, “Cost Analysis of an Improved Z-Source-Based Power Processing System for Photo-Voltaic Applications,” accepted for IEEE Conference on Technologies for Sustainability, Phoenix, Arizona, 2017.

231. W. Harris and M. Ehsani, “Socioeconomically Sustainable Rural Microgrid Engineering Design,” accepted for presentation at 2017 IEEE Global Humanitarian Technology Conference.

232. H. M. K. Al-Masri, A. AbuElrub and M. Ehsani, "Optimization and layout of a wind farm connected to a power distribution system," 2018 IEEE International Conference on Industrial Technology (ICIT), Lyon, 2018, pp. 1049-1054.

233. Jiayuan Zhang, Wei Zhan and Mehrdad Ehsani, "On-line Fault Diagnosis of DC Motor based on the Hidden Markov Model" 2016 IEEE Transportation Electrification Conference and Expo (ITEC2016) Detroit, Michigan, June 27-29, 2016.

234. H. M. K. Al-Masri and M. Ehsani, "Engineering and Socio-Economic Aspects of Sustainable Energy," 2016 IEEE Global Humanitarian Technology Conference (GHTC), Seattle, USA.

235. H. M. K. Al-Masri and M. Ehsani, "Impact of wind turbine modeling on a hybrid renewable energy system," 2016 IEEE Industry Applications Society Annual Meeting, Portland, OR, 2016, pp. 1-8.

236. A. Torkan and M. Ehsani, “Cost Analysis of an Improved Z-Source-Based Power Processing System for Photo-Voltaic Applications,” IEEE Conference on Technologies for Sustainability, Phoenix, Arizona, 2017.

237. W. Harris and M. Ehsani, “Socioeconomically Sustainable Rural Microgrid Engineering Design,” 2017 IEEE Global Humanitarian Technology Conference.

238. A. Almehizia and M. Ehsani, “Feasibility Study of Sustainable Energy Sources in A Fossil Fuel Rich Country,” IEEE International Conference on Environment and Electrical Engineering, Palermo, Italy, June 2018.

239. Mehrdad Ehsani, N. F. Ershad, and R. T. Mehrjardi, “Magneto-Mechanical Regenerative Aircraft Landing System,” AIAA Propulsion and Energy Forum and Exposition, Cincinnati, Ohio, July 2018.

240. A. Torkan and M. Ehsani, “High step-up z-source dc-dc converter with flyback and voltage multiplier,” Applied Power Electronics Conference and Exposition (APEC), 2017 IEEE. IEEE, 2017, pp. 330–336.

241. Torkan, A., and M. Ehsani, “Cost Analysis of an Improved Z-Source-Based Power Processing System for Photo-Voltaic Applications,” Proceedings of 2017 IEEE Conference on Technologies for Sustainability (SusTech)(SusTech 2017),Phoenix, USA.

242. A. Almehizia, H. Al-Masri , and M. Ehsani, “Feasibility Study of Sustainable Energy Sources in A Fossil Fuel Rich Country,” IEEE IAS Annual Meeting, Portland OR, September 2018.

243. M. Ehsani and, A. Bashaireh, “New Dynamic End-to-End Modeling of More Electric Aircraft Power System”, AIAA Propulsion & Energy Forum/EATS 2018.

244. B. Rahrovi and M. Ehsani, “A Review of the More Electric Aircraft Power Electronics,” Texas Power and Energy Conference (TPEC), College Station, Texas, February, 2019.

245. M. Ehsani, “Engineering and Socio-Economic Aspects of Sustainable Energy,” Applied Energy Symposium, MIT, May, 2019.

246. Abdullah Al Hadi, Xingang Fu, Rajab Challoo, Shuhui Li, Mehrdad Ehsani, “ Impact of Mixed Switching Frequency Scheme on Different Topologies of Multilevel Converters for Efficiency Improvement,” submitted to IEEE APEC 2020.

247. B. Rahrovi, R. T. Mehrjardi and M. Ehsani, "On the Analysis and Design of High-Frequency Transformers for Dual and Triple Active Bridge Converters in More Electric Aircraft," 2021 IEEE Texas Power and Energy Conference (TPEC), 2021, pp. 1-6, doi: 10.1109/TPEC51183.2021.9384990.

248. R. T. Mehrjardi, N. F. Ershad, B. Rahrovi and M. Ehsani, "A Precise Analytical Model of the Grid Connected Cascaded Doubly Fed Induction Machine," 2021 IEEE Texas Power and Energy Conference (TPEC), 2021, pp. 1-6, doi: 10.1109/TPEC51183.2021.9384962.

249. Hussein M. K. Al-Masri, Taha Al-Asemi, Nasser Sabr, Khaled Almawari, Ahmad Abuelrub, and Mehrdad Ehsani, "On-Grid Photovoltaic Energy System-A Case Study", 3rd International Conference on Smart Grid and Renewable Energy (SGRE)March 29-31, 2022.

250. Ramin Tafazzoli Mehrjardi, Nima Farrokhzad Ershad, Babak Rahrovi and Mehrdad Ehsani, “A Precise Analytical Model of the Grid Connected Cascaded Doubly Fed Induction Machine,” Presented at TPEC (Texas Power and Energy Conference) in Jan. 2021.

251. R. T. Mehrjardi, N. F. Ershad, B. Rahrovi and M. Ehsani, "Brushless Doubly-Fed Induction Machine with Feed-Forward Torque Compensation Control," 2021 IEEE Texas Power and Energy Conference (TPEC), 2021, pp. 1-6, doi: 10.1109/TPEC51183.2021.9384974.

252. R. T. Mehrjardi, N. F. Ershad, B. Rahrovi and M. Ehsani, "A Precise Analytical Model of the Grid Connected Cascaded Doubly Fed Induction Machine," 2021 IEEE Texas Power and Energy Conference (TPEC), 2021, pp. 1-6, doi: 10.1109/TPEC51183.2021.9384962.

253. Z. Hu, R. T. Mehrjardi and M. Ehsani, "On the Lifetime Emissions of Conventional, Hybrid and Electric Vehicles," 2023 IEEE Texas Power and Energy Conference (TPEC), College Station, TX, USA, 2023, pp. 1-6, doi: 10.1109/TPEC56611.2023.10078609.

254. H. Mazaheri, A. Shawartamimi, and M. Ehsani, "Application of Conversion Function Theory to the Modeling of Multi-Converter Islanded DC Microgrids," Conference on Energy, Texas A&M University, College Station, TX, September 2023.

255. Muhammad Ashar Ayaz, Mehrdad Ehsani, Syed Rahman, Irfan Khan2, " How Green Are Electric Vehicles in Developing Countries?" "How Green Are Electric Vehicles in Developing Countries?", 2024-ICPSD24-0074, accepted for presentation in the 2024 IEEE/IAS 60th Industrial and Commercial Power Systems Technical Conference. Las Vegas, NV 2024.

256. Aya Amer, Sertac Bayhan, Haitham Abu-Rub and Mehrdad Ehsani, "Enhancing Grid Stability through Grid-Interactive Efficient Buildings with Deep Reinforcement Learning: Innovations and Challenges," Submitted to IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society, November 3-6, 2024, Chicago, IL.

257. Yi Deng, Zhemin Hu and Mehrdad Ehsani " Double d-q axes Control of Transgenerator-flywheel System for Wind Power Generation and Energy Storage," TPEC 2025 (2025 IEEE Texas Power and Energy Conference), Number, 22.

258. Yi Deng, Zhemin Hu and Mehrdad Ehsani, "Double d-q axes Control of Transgenerator-flywheel System for Wind Power Generation and Energy Storage," submitted to TPEC 2025, Nov. 2024.

SAMPLES OF SIGNIFICANT TECHNICAL REPORTS

1. "Study of a Self Commutated SCR in an Inductive Energy Storage System," Energy Systems Laboratory, University of Texas, Austin, Co-Author: H. H. Woodson, August 1974.

2. "Square Function Analysis of the Inductor-Converter Bridge," Argonne National Laboratory Technical Memorandum, ANL/FPP/ TM-118, 1979.

3. "Development, Analysis, and Control of the Inductor-Converter Bridge," Argonne National Laboratory Technical Memorandum, ANL/FPP/TM-144, August 1981.

4. "Superconductive Magnet Energy Storage for Pulsed Power Applications,"

5. "Theoretical Analysis of the Dynamics of Inductor-Converter Bridge," Wisconsin Superconductive Energy Storage Project Report, Volume IV, September 1983.

6. "Independent Control of Active and Reactive Power in High Voltage DC Power Transmissions," Research Project Report, Center for Energy and Mineral Resources (CEMR), Texas A&M University, May 1983 and May 1984.

7. "A New One-Phase Dual Converter for Superconducting Inductive Energy Storage and Transfer Applications: The One-Phase Inductor-Converter Bridge," Argonne National Laboratory Technical Memorandum, ANL/FPP/TM-182, March 1984.

8. "Advanced Converter Systems Research and Development for High Performance Aircraft," Research Project Annual Report, General Dynamics, Fort Worth Division, December 1985.

9. "Microcomputer Simulation of Electrified Drilling Rig Systems," Research Project Report, Center for Energy and Mineral Resources, Texas A&M University, May 1986.

10. "Power Electronics Research and Development for High Performance Aircraft," Research Project Report, General Dynamics, Fort Worth Division, December 1986.

11. "Force Commutated Cycloconverters for 400 Hz Generator Systems," Research Project Report, Wright Patterson Air Force Base, October 1986.

12. "New Architectures for Aerospace Vehicle Power Systems," General Dynamics, Forth Worth Division, November 1988.

13. "Optimized Power Conditioning Alternatives for Nuclear Spacecraft," General Electric, Valley Forge, November 1988.

14. "Conceptual Design of the Power Conditioning System for Thermoelectric and Dynamic Power Conversion in a Space Nuclear Power System," NASA Center for Space Power, Texas A&M University, December 1988.

15. "New Architectures for Superconductive and Normal Power Systems," US Interagency Advanced Power Group, Systems Working Group Meeting Report, April 1989.

16. "Application of HiTc Superconductor Materials to Small SMES Systems," Research Report to US Army Electronics Technology and Devices Laboratory, Fort Monmouth, NJ, December 1989.

17. "Superconductive Power Systems," Electric Power Research Institute (EPRI) Research Project Report, 1991.

18. "Smooth Walking Technique in the AUGUR Motor," Rocketdyne Division, Rockwell International, February 1993.

19. "Piezoelectric Motor Drive Development," Rocketdyne Division, Rockwell International, October 1994.

20. Co-author, "Combat Hybrid Power Systems Technologies, Technical Challenges and Research Priorities," a report of National Research Council of the National Academies, 2003.

21. Co-author, Motorola Corporation Research Visionary Board Final report, 2003.

22. Co-author, "Failure Modes and Effects Analysis of Series Hybrid Combat Vehicle" reported to US Army Research Lab, April 2004.

23. Co-author, Motorola Corporation Research Visionary Board Final report, 2005 & 2006.

SAMPLE LECTURES

1. "Power Electronics and Motor Drives," One-Week Short Course, Polytechnic Institute of Guayaquil, Equator, November 1986.

2. "A Force-Commutated Direct Frequency Changer for the Aircraft VSCF Systems," Invited Seminar, Wright Patterson Air Force Base, Aeropropulsion Laboratory, November 1986.

3. "A Solid State DC Breaker for the High Performance Aircraft Power System," Invited Seminar, General Dynamics, Fort Worth Division, December 1986.

4. "Application of the Matrix Converter to the Aircraft VSCF System," Invited Seminar, Sundstrand Corporation, Rockford, Illinois, February 1987.

5. "A Short Course in Power Electronics and Motor Drives," Fisher Controls International, Marshalltown, Iowa, July 1988.

6. "New Concepts in High Power DC-DC Converters, Electromechanical Activators and Pulsed Power Systems," Invited Seminar, Wright Patterson Air Force Base, March 1989.

7. "Power Electronics and Drives," A Short Course Offered by Electric Power Research Institute (EPRI) Power Electronics Applications Center, June 1989.

8. "Comparison of Various Energy Storage Schemes for Military Applications," Invited Half a Day Seminar at US Army Electronics Technology and Devices Laboratory, Fort Monmouth, NJ, January 1989.

9. "Pulse width Modulation (PWM) Techniques," Short Course at IEEE Applied Power Electronics Conference and Exposition (APEC'91), Dallas, March 1991.

10. "Technology Simplification in Switched Reluctance Motor Drives," Short Course at IEEE Applied Power Electronics Conference and Exposition (APEC'91), San Diego, March 1993.

11. "Parallel Hybrid Electric Drive Trains for the Next generation of Passenger Cars," Kay Note Speech in Southeast Michigan Section of IEEE, Dearborn Michigan, April 1998.

12. "Recent Advances and State of the Art in Switched Reluctance Motor Drives," Tutorial at IEEE Applied Power Electronics Conference and Exposition (APEC'2000), New Orleans, LA, February 2000.

13. "Automotive Electrical Power Systems: Current Status & Future Trends," Tutorial at IEEE 2000 Vehicular Technology Conference, Boston, MA, September 2000.

14. Numerous other IEEE Distinguished Lectures, for the Industry Applications and Industrial Electronics Societies, all over the US and worldwide.

15. Short Cycle Time Design of Advanced Motor Drives by the Real Time Simulation and Hardware in the Loop technologies, a two day short course offered to the automotive industry in Detroit, Michigan, Nov. 3-4, 2003.

16. "Integrated Biofuel-Vehicle System", Key Note address given at the opening of the 2004 IEEE-VTS Vehicle Power and Propulsion Symposium in Paris, France, October 4th, 2004

SIGNIFICANT ADDITIONAL INFORMATION

1. Founder of power electronics education and research program at Texas A&M University including a curriculum of two undergraduate and six graduate courses and three

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laboratories for teaching and research: presently the Power Electronics Group at Texas A&M consists of three faculty members and three visiting faculty members. The program enrolls over 100 undergraduate students annually and has had over 40 Ph.D. and 70 M.S. students up to the present.

2. Founder and director, Texas Applied Power Electronics Center TAPC in Electrical Engineering Department, 1982, funded by Texas Engineering Station, Texas A&M Office of University Research, Texas Higher Education Coordinating Board and industrial companies. (A Multidisciplinary center working on the ELPH hybrid vehicle project. Six professors, Texas Transportation Institute and ten industrial companies are collaborating on ELPH, under TAPC, at the present time.)

3. Founder of Advanced Vehicle Systems Research Program, College of Engineering, Texas A&M University, 1992, funded by Texas Engineering Experiment Station, Department of Electrical Engineering, and Texas Transportation Institute.

4. Technical expert for proposal reviews for the US National Science Foundation, Department of Energy, Environmental Protection Agency; Department of Commerce, Canadian National Science and Engineering Council; South African Foundation for Research and Development.

5. World Bank expert for academic program development in Polytechnic Institute of Guayaquil, Equator.

6. Outside expert Ph.D. examiner for Concordia University, Canada and Rand Afrikaans University and the University of Natal, South Africa, and others.

7. Textbook manuscript reviewer for John Wiley & Sons, Inc.; CRC Press; Marcel Dekker, Inc.; Prentice Hall; West Academic Publishing Co. and others.

8. IEEE Standards book reviewer for Power System Harmonics (IEEE Std. 519-199 X) and for the revision of Standards for Practices and Requirements for General Purpose DC Drives.

9. Reviewer for journals and conferences of IEEE Industry Applications Society, Power Electronics Society, Industrial Electronics Society, Control Systems Society, IEEE Proceedings and a few others.

RECENT GRADUATE STUDENTS

1. Shawartamimi, Ali, MS, 2023
2. Tafazzoli Mehrjardi, Ramin, Ph.D, 2023
3. Babak Rahrovi, Ph.D., 2022
4. Yi Deng, Ph.D., 2023
5. Zemin Hu, Ph.D., 2022
6. Kason Carroll, Ph.D., 2024
7. Onesi Daniels, M.S., 2022
8. Ramin Tafazzoli, Ph.D., 2022
9. Abdullah Almehizia, Ph.D., 2018
10. Yiqi Wang, Ph.D., 2019
11. Nima Ershad, Ph.D., 2018
12. Ahmad Bashaireh, Ph.D., 2019
13. Ahmet Yeksan, Ph.D., 2018
14. Ramin Tafazzoli, Ph.D., 2021
15. Babak Rahrovi, Ph.D., 2022
16. Zhemin Hu, Ph.D., 2013
17. Sophia Tijani, M.S., 2023

18. Jiayuan Zhang, Ph.D., 2019
19. Owen Golden, M.S.,2018
20. Riley Kilfoyle, M.S.,2020
21. Arash Torkan, M.S., 2018
22. Sekhar Sankaranarayanan, M.S., 2020
23. Hussein M. K. Al-Masri, Ph.D., 2018
24. Andre de Morais, M.S., completed, June, 2016
25. Owen Golden, M.S., in process
26. William Harris, M.S., in process
27. Ahmet Yeksan, Ph.D., 2018
28. Yang Wang, Ph.D., completed, 2015
29. Billy Yancey, Ph.D., in process
30. Muneer Mohammad, Ph.D., completed, February, 2014
31. Lin Lai, Ph.D., completed November, 2012
32. Milad Falahi, Ph.D.,…Completed September, 2012
33. Neeraj Shidore, DSc.., completed May, 2012
34. Ronald Barazarte, Ph.D., completed May 2011
35. Ali Eskandari, Ph.D., completed May 2011
36. Guadalupe Gonzalez, Ph.D.,completed May 2011
37. Yue Gao, M.E., completed May 2010
38. Billy Yancey, M.S., completed May 2010
39. Sriram Sarma Emani, M.S., completed May 2010
40. Bo Chen, M.S., completed 2009
41. Richard Smith, M.S., completed 2009
42. Hung-ming Chou, M.S., completed 2009
43. Randy Doolittle, M.S., completed 2008
44. Alex Skorcz, M.S. completed Dec. 2007
45. Hugo Mena, M.S. completed Dec. 2007
46. Peyman Asadi, Ph. D., 2007.
47. David Hoelscher, M.S., completed May 2006
48. Steven Welch, M.S., completed Dec. 2005
49. Melissa Lipscomb, M.S., completed Aug. 2005
50. Ravish Ailinani, MEN, completed Aug. 2005
51. Sebastien E. Gay, Ph. D., completed May 2005
52. Neeraj Shidore, M.S., completed 2003
53. Hyung-Woo Lee, Ph. D., completed 2003.
54. Tae-Hyung Kim, Ph. D., completed 2003.
55. Farzad Rajaei Salmasi, Ph. D., completed in 2002.
56. Hongwei Gao, Ph. D., completed in 2001.
57. Baojun Si, Ph. D., completed.
58. Byoung-Kuk Lee, Ph. D., completed in 2001.
59. Stephen W. Moore, Ph. D., completed
60. Velayutham Rajarathnam, Ph. D., completed.
61. Tzong-Shiann Wu, Ph. D., completed.
62. Jean Yves Guy Routex, M.S., completed in 2001.
63. Ziaur Rahman, Ph. D., completed in 2001.
64. Ali Emadi, Ph. D., completed in 2000.
65. Liping Chen, MEN, completed in 2000.
66. Maria Dias Bellar, Ph. D., completed in 2000.
67. Suresh Gopalakrishnan, Ph. D., completed in 2000.
68. Babak Fahimi, Ph. D., completed in 1999.
69. James P. Johnson, Ph. D., completed in 1998.
70. Khawja M. Rahman, Ph. D., completed in 1998.
71. Stephen Moore, M.S., completed in 1997.
72. Yilcan Guzelgunler, M.S., completed in 1997.
73. Yingxia Zhang, M.S., completed in 1996.
74. Kenneth Stevens, M.S., completed in 1996.

75. Aristide Tchamdjou, M.S., completed in 1996.
76. Piyush Tandon, M.S., completed in 1996.
77. J. W. Kim, M.S., completed in 1995.
78. Shamsul Arefeen, M.S., and Ph. D.
79. Jayanthi Arvind, M.S.
80. Gerard Joseph Ashok R., MEN
81. Roger Carlos Becarra, Ph. D.
82. Paul Le Roy Brohlin, M.S.
83. Mallappa I. Guggari, M.S.
84. James M. Hansen, M.S.
85. Shahria Khan, M.S.
86. Ashok B. Kulkarni, Ph. D.
87. Alfonso Rafael Ledezma, MEN
88. Pascal Louis Noel Le Polles, M.S.
89. Touzhu, Li, Ph. D.
90. Shailendra Mahajan, M.S.
91. Jorge Carlos Menendez, M.S.
92. Nabil Hussein Qawasmi, M.S.
93. Ranganathan Charath Ram, M.S.
94. David Alan Riesz, MEN
95. Michael Arthur Schoen, M.S.
96. Sameer Sodhi, M.S.
97. Terry Joseph Villarreal, M.S.
98. Yuemin Zhang, M.S.
99. Jim Bass, Ph.D.
100. Yoon Ho Kim, Ph.D.
101. Ali Hozhabri, Ph.D.

Sample of Ex-Students that are Faculty Members

1- Yoon Ho Kim	Chung Ang University, Korea
2- Ali Hozhabri	University of Arkansas
3- Babak Fahimi	University of Texas at Arlington
4- Maria Bellar	State University of Rio de Janeiro, Brazil
5- Ali Emadi	Illinois Institute of Technology
6- Byoung-Kuk Lee	Sungkyunkwan University, Korea
7- Hongwei Gao	Montana State University
8- Farzad Rajaei Salmasi	University of Tehran, Iran
9- Tae-Hyung Kim	University of Michigan, Dearborn
10- Rhonda Drayton (undergraduate)	University of Minnesota
11- Ronald Barazarte	Technological University of Panama (UTP)
12- Guadalupe Gonzalez	Technological University of Panama (UTP)

13- Abdullah Almehizia, 2018	National Center for Technologies of Electrical Energy Systems at King Abdulaziz City for Science and Technology (KACST)
14- Hussein M. K. Al-Masri	Yarmouk University, Irbid, Jordan
15- Ahmad Bashaireh	Jordan University of Science and Technology

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1- Case: Field v. Toyota
Case type and topic: Patent Litigation – Hybrid Vehicle Technology
Attorney/Firm: Oliff & Berridge, on Toyota side
Responsibilities: Retained expert on power technology
Date/Status: 2004 (Closed, in Toyota's favor)

2- Case: Infineon v. Greenpower
Case type and topic: Patent Litigation- DC-DC Power Converters
Attorney/Firm: Paul Ragusa, Baker Botts, on Infineon side
Responsibilities: Technical Expert, Expert Report, Deposed, Patent technical interpretation.
Date/Status: 2005 (Closed, in Infineon's favor)

3- Case: Microsemi v. Monolythic
Case type and topic: Patent Litigation – Cold Cathode Lamp Power Supplies
Attorney/Firm: Winstead, on Microsemi side

Responsibilities: Retained by the plaintiff as the technical expert on patent infringement and related technical issues.
Date/Status: 2004-2005 (settled in favor of Microsemi)

4- Case: Eagle Research Corp. v. Emerson Electric Co. et. al.
Case type and topic: Breach of Technical Information Confidentiality on Gas Flow Meters
Attorney/Firm: Locke Liddell & Sapp, LLP, on Emerson Side
Responsibilities: Expert Witness and consultant
Date/Status: 2005-2006 (complete)

5- Case: Power-One, Inc. V. Artesyn Technologies, Inc.
Case type and topic: Point of Load Regulator and Power Converters
Attorney/Firm: Steven Katz, Fish & Richardson, P.C., for Power-One, Inc.
Responsibilities: Expert Witness and consultant
Dates/Status: 2005- 2007 (Power-One won in trial)

6- Case: O2 Micro International, Ltd. V. Rohm Co., Ltd., et. al.
Case type and topic: Cold Cathode Fluorecsent Lamp, CCFL, Power Controllers
Attorney/Firm: James Shimota, Kirkland & Ellis, LLP, for Rohm Co.
Responsibilities: Non testifying technical consultant
Dates/Status: 2006 (closed)

7- Case: GE v. Mitsubishi
Case type and topic: Wind turbine generator system
Attorney/Firm: Finnegan
Responsibilities: Testifying expert witness
Dates/Status: 2010-2012, Tried in Dallas Fed. Dist. Court (Jury verdict in favor of GE)

8- Case: Milwaukee Electric Tool Corp. v. Hitachi Koki Co, LTD
Case type and topic: Lithium ion battery system patents
Attorney/Firm: Scott D. Sherwin / Morgan, Lewis & Bockius LLP
Responsibilities: Testifying expert witness
Dates/Status: 2010-2012, Settled, Chicago Fed. Dist. Court

9- Case: Lineage v. SynQor Case
type and topic: Patent Litigation
Attorney/Firm: Sidley Austin LLP
Responsibilities: Expert Witness
Date/Status: 2011 (Settled)

10- Case: Paice, LLC v. Hyundai-Kia Inc
Case Topic: Hybrid Electric Vehicles
Firm: QE
Responsibilities: Testifying expert for Hyundai
Dates/Status: 2012-2015, Tried in Baltimore Fed. Dist. Court

11- Case: Leviton v. Hubbell
Case type and topic: Ground fault protection patents
Attorney/Firm: Matt Argenti / Wilson Sonsini Goodrich & Rosati, LLP
Responsibilities: Testifying expert witness
Dates/Status: 2013, Settled, Fed. Dist. Court, New York

12- Case: Milwaukee Electric Tool Corp. v. Hitachi Koki Co, LTD
Case type and topic: Lithium ion battery system patents
Attorney/Firm: Scott D. Sherwin / Morgan, Lewis & Bockius LLP
Responsibilities: Testifying expert witness
Dates/Status: 2010-2012, Settled, Chicago Fed. Dist. Court

13- Case: Ushijima v. Samsung Electronics Co. LTD
Case type and topic: CCFL driver electronics and magnetics
Attorney/Firm: Baker Botts LLP, 30 Rockefeller Plaza, New York, NY 10112
Responsibilities: Testifying expert for Samsung
Dates/Status: 2014-2015, Tried in Austin Fed. Dist. Court (Jury verdict in favor of Samsung)

14- IPR Case: NIDEC v. Broad Ocean
Case Topic: Power Electronic Motor Drives/HVAC
Firm: Lock Lord LLP, Houston, Texas
Date: 2015

15- IPR Case: WABESTO v. UUSI
Case Topic: Automotive Electrical System
Attorney/Firm: Monte Falcoff/HARNESS, DICKEY & PIERCE, P.L.C., Troy, Michigan
Date: 2015

16- IPR Case: UUSI v. Borse North
Case Topic: Automotive Electrical System

Attorney/Firm: Monte Falcoff/HARNESS, DICKEY & PIERCE, P.L.C., Troy, Michigan
Date: 2015

17- IPR Case: Signal IP v. Porsche Case
Case Topic: Hybrid Electric Vehicles
Attorney/Firm: David Rossi/Frommer Laurance & Haug LLP, New York City
Date: 2015

18- Case TransData, Inc. Smart Meters Patent Litigation
Case No.: 5:12-ml-02309-C
Attorney/Firm: Haynes and Boon LLP
Responsibilities: Testifying expert witness for TransData
Dates/Status: 2014-Settled in 2016 in favor of TransData

19- Ushijima v. Samsung Electronics Co. LTD
Case No.: TXWD-1:16-cv-00585
Case type and topic: CCFL driver electronics and magnetics
Parties: Masakazu Ushijima, Plaintiff; Samsung Electronics Co. LTD, Samsung Electironics America, Inc., Defendants
Responsibilities: Testifying expert for the defendant

20- Intellectual Ventures II, LLC v. BMW Manufacturing Co., LLC
Case No.: DED-1:17-cv-00296
Case type and topic: Electric motors
Parties: Intellectual Ventures II, LLC, Plaintiff; BMW AG, BMW Manufacturing Co., LLC, BMW of North America, LLC, Defendants
Responsibilities: Testifying expert for the defendant

21- In re Transdata Inc. Smart Meters Patent Litigation
Case No.: OKWD-5:12-ml-02309
Case type and topic: Smart utility power meters patent infringement
Parties: Transdata Inc., Plaintiffs; San Diego Gas & Electric Company, Denton County Electric Cooperative Inc, Centerpoint Energy Houston Electric LLC, Denton Municipal Electric, Oncor Electric Delivery Company LLC, Texas-New Mexico Power Company, Tri-County Electric Cooperative Inc, Defendants
Responsibilities: Testifying expert for plaintiff TransData

22- Paice, LLC v. Hyundai-Kia Inc
Case No.: MDD-1:12-cv-00499
Case Topic: Hybrid Electric Vehicles
Parties: Paice LLC, The Abell Foundation, Inc., Plaintiffs; Hyundai Motor America, Inc., Hyundai Motor Company, Kia Motors America, Inc., Kia Motors Corporation, Toyota Motor Corporation, Toyota

Motor North America, Inc., Toyota Motor Sales, USA, Inc., Defendants
Responsibilities: Testifying expert for defendant Hyundai

23- Ushijima v. Samsung Electronics Co. LTD
Case No.: TXWD-1:12-cv-00318
Case type and topic: CCFL driver electronics and magnetics
Parties: Masakazu Ushijima, Plaintiff; Samsung Electronics Co. LTD, Samsung Electironics America, Inc., Defendants
Responsibilities: Testifying expert for defendant Samsung

24- Milwaukee Electric Tool Corp. v. Hitachi Koki Co, LTD
Case No.: WIED-2:09-cv-00948
Case type and topic: Lithium ion battery system patents
Parties: Milwaukee Electric Tool Corp., Plaintiff; Hitachi Koki Co Ltd, Defendant
Responsibilities: Testifying expert for the Plaintiff

25- Broad Ocean Motor LLC v. Nidec Motor Corporation
IPR Nos.: IPR2014-001121; IPR2014-001122; IPR2014-001123 (PTAB)
Case Topic: Power Electronic Motor Drives/HVAC
Parties: Broad Ocean Motor LLC, Broad Ocean Technologies, LLC, Zhongshan Broad Ocean Motor Co., Ltd., Petitioners; Nidec Motor Corporation, Patent Owner
Responsibilities: Testifying expert for Petitioners

26- Webasto Roof Systems, Inc. v. UUSI, LLC
IPR Nos.: IPR2014-00648; IPR2014-00649; IPR2014-00650 (PTAB)
Case Topic: Automotive Electrical System
Parties: Webasto Roof Systems, Inc., Petitioner; Nartron Corporation, UUSI, LLC d/b/a Nartron, Patent Owner
Responsibilities: Testifying expert for Patent Owner

27- Brose North America, Inc. v. Nartron Corporation
IPR Nos.: IPR2014-00416; IPR2014-00417 (PTAB)
Case Topic: Automotive Electrical System
Parties: Brose Fahrzeugteile GmbH & Co. KG, Hallstadt, Brose North America, Inc., Petitioners; Nartron Corporation, UUSI, LLC d/b/a Nartron, Patent Owner
Responsibilities: Testifying expert for Patent Owner

28- Porsche Cars North America, Inc. v. SIGNAL IP, INC.
IPR No.: IPR2015-01404 (PTAB)
Case Topic: Hybrid Electric Vehicles
Parties: Porsche Cars North America, Inc., Petitioner; Signal IP, Inc.

Patent Owner
Responsibilities: Testifying expert for Petitioner
Settled

29- Hilti, Inc. v. Milwaukee Electric Tool Corporation
IPR Nos.: IPR2015-01164; IPR2015-01165; IPR2015-01166 (PTAB)
Case Topic: Lithium ion battery system patents
Parties: Hilti AG, Hilti, Inc., Petitioner; Milwaukee Electric Tool Corporation, Patent Owner
Responsibilities: Testifying expert for Patent Owner
Settled

30- Snap-on Incorporated v. Milwaukee Electric Tool Corporation
IPR Nos.: IPR2016-00343; IPR2016-00344; IPR2016-00345 (PTAB)
Case Topic: Electric motor
Parties: Snap-On Incorporated, Petitioner; Milwaukee Electric Tool Corporation, Patent Owner
Responsibilities: Testifying expert for Patent Owner
Trial complete

31- BMW of North America, LLC v. Intellectual Ventures II
IPR No.: IPR2017-01836 (PTAB)
Case Topic: Electric motor
Parties: BMW AG, BMW Manufacturing Co., LLC, BMW of North America, LLC, Petitioners; Intellectual Ventures II, LLC, Patent Owner
Responsibilities: Testifying expert for Petitioners
Settled

32- BMW of North America, LLC v. Intellectual Ventures II
IPR No.: IPR2017-0 1558 (PTAB)
Case Topic: Electric motor
Parties: BMW AG, BMW Manufacturing Co., LLC, BMW of North America, LLC, Petitioners; Intellectual Ventures II, LLC, Patent Owner
Responsibilities: Testifying expert for Petitioners
Settled

33- Wirtgen America v. Caterpillar
IPR and ITC cases
Case Topic: Electrical Heating System of Paving Machines
Responsibilities: Testifying Expert
Settled

34- Mag Aerospace v. Aveox
Product Liability Case
Case Topic: Aircraft Power Electronics and Motor Drives
Responsibilities: testifying expert
Settled

35- Quanergy Systems, Inc. v. Velodyne LiDAR, Inc. et al.
Patent infringement Case
Case Topic: Autonomous Vehicle Technology
Responsibilities: testifying expert
Settled

36- Dongguan Juxing Power Co. Ltd., et al. v.
The NOCO Company
IPR: PETITION FOR INTER PARTES REVIEW OF UNITED STATES PATENT NO. 9,007,015 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42
Case Topic: Vehicle Battery State of Charge Sensor
Responsibilities: testifying expert
Settled

37- Faraday & Future. Inc. v. EVelozcity. Inc., Case No. 2:18-cv-00737-DMG-RAO
Case Topic: Corporate Tech Transfer on Electric Vehicle Technology
Responsibilities: I was for the defendant Krause :
Kirkland &Ellis website, testifying
expert Settled 2019

38- - State Of Michigan
In The Circuit Court For The County Of Oakland
Trw Automotive U.S. Llc, And Trw Vehicle Safety Systems, Inc., Plaintiffs, Vs. Case No. 2019-173549-Cb
Panasonic Industrial Hon. James M. Alexander Devices Sales Company Of America, Defendant.

39- United States District Court Central District Of California Remy Mccarthy, Kathleen Ryan-Blaufuss, Cathleen Ills, Jason Reid, And Khek Kuan, On Behalf Of Themselves And All Others Similarly Situated, Plaintiffs, Vs. Toyota Motor Corporation, Toyota Motor Sales, U.S.A., Nc., And Doe Defendants 1-10, Defendants. Jevdet Rexhepi, Stephen Kosareff And Laura Kakish, On Behalf Of Themselves And All Others Similarly Situated, Case No. 8:18-Cv-00201-Jls-Kes Class Action [Proposed] Stipulated Protective Order [Discovery Document: Referred To Magistrate Judge Karen E. Scott] Vs., Plaintiffs, Toyota Motor Sales Usa, Nc., And Does 1-10, Inclusive, Defendants.

40- United States Patent And Trademark Office
Before The Patent Trial And Appeal Board
Volkswagen Group Of America, Inc.
Petitioner
V.
Michigan Motor Technologies, Llc
Patent Owner
Case IPR2020-00169

41- Matters: Volterra Semiconductor Llc V. Monolithic Power Systems, Inc. (1-19-Cv-02240, USDC - Wilmington, De), And Any Related Cases Or Proceedings (Including, But Not Limited To, Associated PTAB, USDC And IIC Matters)
Client: Monolithic Power Systems, Inc. Law Firm: Finnegan Henderson

Attorneys: Lionel Lavenue, Ben Cassady, Leon Lin

42- Case No. Dc-18-01068
Dallas County, Texas
Sean Dunnigan § In The District Court Of
Plaintiff, V. Fiberlight, Llc, American Electric Power, Broadband Specialist, Inc., Locke Ventures, Ltd., And Gerard M. Locke, Sr.

43- United States International Trade Commission
Washington, D.C.
In The Matter Of Certain Lithium Ion Batteries, Battery Cells, Battery Modules, Battery Packs, Components Thereof, And Processes Therefor
Inv. No. 337-TA-1159

44- United States Patent And Trademark Office
Before The Patent Trial And Appeal Board
Flywheel Sports, Inc.,
Petitioner
V.
Peloton Interactive, Inc.,
Patent Owner
Case No. IPR2019-
00294 Patent No.
9,174,085

45- Case No. 2019-27459
Halliburton Energy Services, Inc.
Plaintiff,
V.
Jianying "Jerry" Chu
Defendant.
In The District Court Of
Harris County, Texas
127th Judicial District

46- United States District Court
Northern District Of
California San Jose Division
Quanergy Systems, Inc.
Plaintiff And Counterclaim
Defendant,
V.
Velodyne Lidar, Inc.
Defendant And Counterclaim Plaintiff
Case No.: 5:16-Cv-05251-Ejd

47- Superior Court Of The State Of California
For The County Of Los Angeles
Mag Aerospace Industries,
Inc., A Delaware
Corporation, Plaintiff,
V.
Aveox, Inc., A California Corporation, And Does 1 Through 100, Inclusive,
Defendants.

48- United States District Court
Northern District Of
California San Jose Division
Quanergy Systems, Inc.
Plaintiff And Counterclaim
Defendant,
V.
Velodyne Lidar, Inc.
Defendant And Counterclaim Plaintiff
Case No.: 5:16-Cv-05251-Ejd

49- Judicial Arbitration And Mediation Services
Faraday&Future, Inc.,
Claimant
Vs.
Stefan Krause, Ulrich Kranz, Richard Kim, Sohel Merchant, Irving (Bill) Strickland,
Christoph Kuttner, And Does 5-10, Respondents.
JAMS Reference No. 1210035060

50- United States Patent And Trademark Office Before The Patent Trial And Appeal
Board
Dongguan Juxing Power Co. Ltd.,
Petitioners,
V.
The Noco Company,
Patent Owner
Case IPR2018-00503 Patent No. 9,007,015

51- Filed Under Seal – Confidential Attorneys Eyes Information Only
United States District Court For The Eastern District Of Texas
Sherman Division
Spark Connected, Llc, Kenneth Moore, Emanuel Stingu, And Ruwanga Dassanayake,
Plaintiffs And Counter-Defendants,
V.
Semtech Corporation,

Defendant And Counter-Plaintiff.
Civil Action No. 4:18-Cv-00748

52- Milwaukee Electric Tool Corp. v. Hitachi Koki Co, LTD
Case No.: WIED-2:09-cv-00948
Case type and topic: Lithium ion battery system patents
Parties: Milwaukee Electric Tool Corp., Plaintiff; Hitachi Koki Co Ltd, Defendant
Responsibilities: Testifying expert for the Plaintiff

53- Broad Ocean Motor LLC v. Nidec Motor Corporation
IPR Nos.: IPR2014-001121; IPR2014-001122; IPR2014-001123 (PTAB)
Case Topic: Power Electronic Motor Drives/HVAC
Parties: Broad Ocean Motor LLC, Broad Ocean Technologies, LLC, Zhongshan Broad Ocean Motor Co., Ltd., Petitioners; Nidec Motor Corporation, Patent Owner
Responsibilities: Testifying expert for Petitioners

54- Webasto Roof Systems, Inc. v. UUSI, LLC
IPR Nos.: IPR2014-00648; IPR2014-00649; IPR2014-00650 (PTAB)
Case Topic: Automotive Electrical System
Parties: Webasto Roof Systems, Inc., Petitioner; Nartron Corporation, UUSI, LLC d/b/a Nartron, Patent Owner
Responsibilities: Testifying expert for Patent Owner

55- Brose North America, Inc. v. Nartron Corporation
IPR Nos.: IPR2014-00416; IPR2014-00417 (PTAB)
Case Topic: Automotive Electrical System
Parties: Brose Fahrzeugteile GmbH & Co. KG, Hallstadt, Brose North America, Inc., Petitioners; Nartron Corporation, UUSI, LLC d/b/a Nartron, Patent Owner
Responsibilities: Testifying expert for Patent Owner

56- Porsche Cars North America, Inc. v. SIGNAL IP, INC.
IPR No.: IPR2015-01404 (PTAB)
Case Topic: Hybrid Electric Vehicles
Parties: Porsche Cars North America, Inc., Petitioner; Signal IP, Inc., Patent Owner
Responsibilities: Testifying expert for Petitioner

57- Hilti, Inc. v. Milwaukee Electric Tool Corporation
IPR Nos.: IPR2015-01164; IPR2015-01165; IPR2015-01166 (PTAB)
Case Topic: Lithium ion battery system patents
Parties: Hilti AG, Hilti, Inc., Petitioner; Milwaukee Electric Tool Corporation, Patent Owner
Responsibilities: Testifying expert for Patent Owner

58- Snap-on Incorporated v. Milwaukee Electric Tool Corporation
IPR Nos.: IPR2016-00343; IPR2016-00344; IPR2016-00345 (PTAB)
Case Topic: Electric motor
Parties: Snap-On Incorporated, Petitioner; Milwaukee Electric Tool Corporation, Patent Owner
Responsibilities: Testifying expert for Patent Owner

59- BMW of North America, LLC v. Intellectual Ventures II
IPR No.: IPR2017-01836 (PTAB)
Case Topic: Electric motor
Parties: BMW AG, BMW Manufacturing Co., LLC, BMW of North America, LLC, Petitioners; Intellectual Ventures II, LLC, Patent Owner
Responsibilities: Testifying expert for Petitioners

60- BMW of North America, LLC v. Intellectual Ventures II
IPR No.: IPR2017-0 1558 (PTAB)
Case Topic: Electric motor
Parties: BMW AG, BMW Manufacturing Co., LLC, BMW of North America, LLC, Petitioners; Intellectual Ventures II, LLC, Patent Owner
Responsibilities: Testifying expert for Petitioners

61- Wirtgen America v. Caterpillar
IPR and ITC Cases
Case Topic: Electrical Heating System of Paving Machines
Responsibilities: Testifying Expert

62- Mag Aerospace v. Aveox
Product Liability Case
Case Topic: Aircraft Power Electronics and Motor Drives
Responsibilities: testifying expert

63- Quanergy Systems, Inc. v. Velodyne LiDAR, Inc. et al.
Patent infringement Case
Case Topic: Autonomous Vehicle Technology
Responsibilities: testifying expert

64- Dongguan Juxing Power Co. Ltd., et al. v. The NOCO Company
IPR Case
Case Topic: Vehicle Battery State of Charge Sensor
Responsibilities: testifying expert

65- Faraday & Future. Inc. v. EVelozcity. Inc.,
Case No. 2:18-cv-00737-DMG-RAO (C.D.
Cal.)
Case Topic: Corporate Tech Transfer on Electric Vehicle Technology
Responsibilities: testifying expert

66- State Of Michigan, Circuit Court For The County Of Oakland
Case No. 2019-173549-Cb
Trw Automotive U.S. Llc, And Trw Vehicle Safety Systems, Inc., Vs.
Panasonic Industrial Devices Sales Company Of America

67- United States District Court Central District Of California Remy Mccarthy, Kathleen Ryan-Blaufuss, Cathleen Ills, Jason Reid, And Khek Kuan, On Behalf Of Themselves And All Others Similarly Situated, Plaintiffs, Vs. Toyota Motor Corporation, Toyota Motor Sales, U.S.A., Nc., And Doe Defendants 1-10, Defendants. Jevdet Rexhepi, Stephen Kosareff And Laura Kakish, On Behalf Of Themselves And All Others Similarly Situated,
Case No. 8:18-Cv-00201-Jls-Kes
Class Action

68- IPR Case
Volkswagen Group Of America, Inc.
V.
Michigan Motor Technologies, Llc
Case IPR2020-00169

69- Volterra Semiconductor Llc V. Monolithic Power Systems, Inc.
1-19-Cv-02240, D. Del.
Client: Monolithic Power Systems, Inc.
Cause No. Dc-18-01068
Dallas County, Texas
Sean Dunnigan Vs. Fiberlight, Llc, American Electric Power, Broadband Specialist, Inc., Locke Ventures, Ltd., And Gerard M. Locke, Sr.

70- United States International Trade Commission, Washington, D.C.
In The Matter Of Certain Lithium Ion Batteries, Battery Cells, Battery Modules, Battery Packs, Components Thereof, And Processes Therefor Inv. No. 337-TA-1159

71- IPR Case
Flywheel Sports, Inc., V. Peloton Interactive, Inc.,
Case No. IPR2019-00294

72- District Court Of Harris County, Texas, 127th Judicial District
Case No. 2019-27459
Halliburton Energy Services, Inc. V. Jianying "Jerry" Chu

73- Northern District Of California
Quanergy Systems, Inc. V. Velodyne Lidar, Inc.
Case No.: 5:16-Cv-05251-Ejd

74- Superior Court Of The State Of California For The County Of Los Angeles
Mag Aerospace Industries, Inc., V. Aveox, Inc., A California Corporation,
And Does 1 Through 100, Inclusive Case No. Bc629619

75- Northern District Of California
Quanergy Systems, Inc. V. Velodyne Lidar, Inc.
Case No.: 5:16-Cv-05251-Ejd

76- Judicial Arbitration And Mediation Services
Faraday&Future, Inc., Vs. Stefan Krause, Ulrich Kranz, Richard Kim, Sohel Merchant, Irving (Bill) Strickland, Christoph Kuttner, And Does 5-10,
JAMS Reference No. 1210035060

77- IPR Case
Dongguan Juxing Power Co. Ltd., V. The Noco Company,
Case IPR2018-00503
Eastern District Of Texas
Spark Connected, Llc, Kenneth Moore, Emanuel Stingu, And Ruwanga Dassanayake, V. Semtech Corporation,
Civil Action No. 4:18-Cv-00748

78- TRW v. Panasonic, 2020

Case:	Product failure case
Responsibilities:	Expert Witness and failure investigation expert
Status:	Settled.

79- CFL Technologies LLC v. General Electric Co. et al
Flachsbart & Greenspoon LLC
333 N. Michigan Ave., 27th Floor
Chicago, IL 60601-3901
June 22, 2020
I was on CFL side, No report

80- VOLKSWAGEN GROUP OF AMERICA, INC., Petitioner v. MICHIGAN MOTOR TECHNOLOGIES LLC, Patent Owner Case IPR2020-00226
IPR case
Law firm : Sterne, Kessler, Goldstein & Fox, P.L.L.C.
1100 New York Avenue, NW
Washington DC 20005
Contact attorneys :
Michael Specht, 202-772-8756
Jason Fitzsimmons, 202-772-8701

81- FORTIS ADVISORS, LLC, Plaintiff, v. DEMATIC CORP. Defendant. C.A. No. N18C-12-104 AML (CCLD)
I was with Fortis, deposition, court testimony
Attorney: John Attenbury 806-674-0369
jattenbury@gmail.com & Michael Pullara michaelpullara@gmail.com 713-522-0733
2021

82- ROLLS-ROYCE NORTH AMERICAN
TECHNOLOGIES INC. v. DYNETICS,
INC.
Rolls-Royce Law Firm: DLA
Piper 500 Eighth Street, NW
Washington DC 20004

83- Client: Vicky Cote Vanguard
Claims Administration
Topic: wind turbine blades damage
Case Administrator: Vicky
Janashvili Forensis Group
File # XS07905 Certain Underwriters at Lloyds, London c/o Vanguard Claims Administration, Inc. 108 Euclid Street - PO Box 835 Woodbury, NJ 08096 COPY Hyannis Country Garden Inc. 380 West Main Street Hyannis, MA 02601
CLAIMANT 2020

84- VLSI Technology, LLC v. Intel Corporation
Nos. 19-254, -255, -256-ADA (W.D. Tex.) Wilmer
for Intel, ("WilmerHale") Nos. 19-254, -255, -256-ADA (W.D. Tex.)
Wilmer 2019
I was on Intel side, no report

85- Remy McCarthy et al v. Toyota
Law firms : Fazio, Micheletti LLP and Miller Barondess LLP
1111 Broadway, Suite 400, Oakland, CA 94607
Attorneys : Jeffrey L. Fazio , 925-543-2555
and Amon Siegel of Miller Barondess LLP,
1999 Avenue of the Stars, Suite 1000, Los
Angeles, CA 90067, 310-552-7559

86- VOLKSWAGEN GROUP OF AMERICA, INC.,
Petitioner, v. MICHIGAN MOTOR TECHNOLOGIES, LLC, Patent
Owner Case IPR2020-00454
Patent 6,444,115
IPR case
For VW: Law firm : Sterne, Kessler, Goldstein & Fox,
P.L.L.C. 1100 New York Avenue, NW
Washington DC 20005
Contact attorneys :
Michael Specht, 202-772-8756
Jason Fitzsimmons, 202-772-8701

87- Lancium v. Layer 1 Technologies
For Layer 1 Technologies, Inc.
Law Firm: Fenwick & West LLP
801 California Street

Mountain View, CA 94041
Contact attorneys:
Fredrick Tseng: 650-335-7982
Rajiv Patel: 650-335-7607
2020

88- UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
Precision Power, LLC, Petitioner v. PowerTec Solutions International, LLC, Patent Owner
Patent No. 10,714,954 to Battat et
al. PGR Case No.: PGR2021-[ ]
Greenberg Taurig LLP
77 West Wacker Drive, Suite 3100, Chicago, IL
60601 I was on the side of Precision Power, settled,
2021

89- UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA (SAN JOSE DIVISION) MAXIM INTEGRATED PRODUCTS, INC. and VOLTERRA SEMICONDUCTOR LLC, Plaintiffs, v. SILICON MITUS, INC. and SILICON MITUS TECHNOLOGY, INC., Defendants.
Case No. 5:17-cv-03507-NC
I was the expert for SILOCON MITUS
Settled, 2018

90- Expert services on behalf of Deltran USA LLC, ITC Investigation No. 337-TA-1256 law firm of Fox Rothschild LLP ("Fox") on behalf of Deltran USA LLC ("Deltran")
Settled, 2021

91- EMA ELECTROMECHANICS, INC. v. SIEMENS CORPORATION, AND SIEMENS INDUSTRY, INC.
Law Firm: McGuire Woods LLP
Attorney: Eric Schlichter, 832-255-6330
I was the expert on Siemens side, 2022.

92- Bearbox LLV v. Lancium LLC et. al.
I was on Lancium side
Lead attorney: Mark
Nelson 214-258-4140
214-796-1319 (mobile)
Law Firm: Barnes and Thornburg LLP 2121 N Pearl Street
Suite 700
Dallas, Texas 75201

93- US Well v. Halliburton I
was on Halliburton side
Baker Botts law firm
98 San Jacinto Blvd. Suite 1500, Austin, Texas 78701

Attorney: Brian Oaks, Brett Thompson: 512-300-5767, Brandon Chen

94- Faraday & Future. Inc. v. EVelozcity. Inc., Case
No. 2:18-cv-00737-DMG-RAO (C.D. Cal.)
Case Topic: Corporate Tech Transfer on Electric Vehicle
Technology Responsibilities: testifying expert

95- Volterra Semiconductor Llc V. Monolithic Power Systems, Inc.
1-19-Cv-02240, D. Del.
Client: Monolithic Power Systems, Inc.
Case No. Dc-18-01068
Dallas County, Texas
Sean Dunnigan Vs. Fiberlight, Llc, American Electric Power, Broadband Specialist, Inc., Locke Ventures, Ltd., And Gerard M. Locke, Sr.

96- IPR Case
I was on Peloton side and was deposed and wrote a report
Flywheel Sports, Inc., V. Peloton Interactive, Inc.,
Case No. IPR2019-00294

97- District Court Of Harris County, Texas, 127th Judicial District
Cause No. 2019-27459
Halliburton Energy Services, Inc. V. Jianying "Jerry" Chu
I was on Halliburton side, with report and deposition

98- Superior Court Of The State Of California For The County Of Los Angeles Mag Aerospace Industries, Inc., V. Aveox, Inc., A California Corporation, Case No. Bc629619
I was on Mag Aerospace side, with expert report

99- Northern District Of California
Quanergy Systems, Inc. V. Velodyne Lidar, Inc.
Case No.: 5:16-Cv-05251-Ejd
I was on Quanergy side, no reports

100- The NOCO Company, an Ohio corporation, Plaintiff, v. Deltona Transformer Corporation, a Florida Corporation, and Deltran USA, LLC, a Florida Limited Liability Company, Defendants.
M.D. Fla. 2023

101- Rhombus Energy Solutions, Inc., a BorgWarner Company v.
Nuvve Holding Corp.,
JAMS Ref. No.
5240000332 2023

102- ALSI Holdings, LLC vs. Current Lighting Solutions, LLC, d/b/a GE Current, a Daintree Company, Case No. 6:21-cv-01187-ADA (W.D. Tex. 2021)

103- Samsung Electronics Co., Ltd. et al. v. Lynk Labs, Inc., 1:21-cv-02665 (N.D. Ill.)

104- Unicorn Energy AG v. Tesla Docket No. 5:21-cv-07476
N.D. Cal. Sep 28, 2021

105- IPR Case
Dongguan Juxing Power Co. Ltd., V. The Noco Company,
Case IPR2018-00503
Eastern District Of Texas
Spark Connected, Llc, Kenneth Moore, Emanuel Stingu, And Ruwanga Dassanayake, V. Semtech Corporation,
Civil Action No. 4:18-Cv-00748
I was on Noco Deltron side, no reports

106- TRW v. Panasonic, 2020
Case: Product failure case
Responsibilities: Expert Witness and failure investigation expert
Status: Settled.
I was on TRW side and wrote a report

107- Zunum Aero v. Boeing Company
W.D. Wash. 2024
No. C210896JLR

108- Unified Patents v. Causam PTAB 2022
IPR
NOCO Company v. Deltona Transformer Corporation, No. 6:23-cv-02194
(M.D. Fla. Nov 13, 2023)

109- Delta Electronics, Inc. v. VICOR Corp.
Law Firm: Kirkland & Ellis, LLP
May 3, 2024

110- VC Brands LLC and Tech Lighting LLCv. Wangs Alliance Corp. d/b/a WAC Lighting,
ITC No. 337-1374 , FEBRUARY 17, 2024

111- EL SAUZ RANCH WIND, LLC V. NORDEX USA, INC., MAY 7, 2024

112- Hikam America, Inc. v. Shoals Technologies Group, LLC
Law Firm: Maier & Maier
345 South Patrick Street
Alexandria VA 22314
March 7, 2024

113- Signify Holding B.V. v. Current Lighting Solutions, LLC
DUANE MORRIS LLP 100 HIGH STREET, SUITE 2400 BOSTON, MA 02110-1724
DECEMBER 3, 2023

114- Wahoo v. Zwift, Gibson, Dunn & Crutcher LLP
2001 Ross Avenue Suite 2100, Dallas, TX 75201 On
July 28, 2023

115- ZUNUM AERO, INC., Plaintiff, vs. THE BOEING COMPANY; BOEING HORIZONX VENTURES, LLC,
Case No. 2:21-cv-00896-JLR,
Law firm: Hueston Hannigan, 2024.

116- CFL Technologies LLC v. General Electric Co. et al, Flachsbart & Greenspoon LLC, 2024.

117- CERTAIN POWER CONVERTER MODULES AND COMPUTING SYSTEMS CONTAINING THE SAME, Kirkland and Ellis LLP, Investigation No. 337-TA-1370, UNITED STATES INTERNATIONAL TRADE COMMISSION, WASHINGTON DC
Before the Honorable Cameron R. Elliot, Administrative Law Judge, 2024.

118- Altronic v. MOTORTECH, ITC Investigation No. 337-TA-1390
Law firm: Merchant & Gould, P.C.
I was for MOTORTECH
Before the Honorable Clark S. Cheney, Chief Administrative Law Judge, 2024.