



The Embedded Systems Experts

## Neil Hannemann

### Summary

Automotive engineer with over 25 years of experience in road and race vehicle engineering and design. Additional experience in forensics consulting for attorneys regarding product liability litigations, aero-thermal development, suspension design, as well as analysis, testing, and Automotive X-prize proposal development.

### Work Experience

**Barr Group**, *Principal Engineer*, Jun 2014 – present

Consulting services / support for patent and copyright and liability litigation

**Automotive Consultant**, Feb 2007 – present

Forensics consulting, testifying regarding product liability litigation, Kepler Motors Program Manager, and Race vehicle engineering

**Aptera Motors, Inc**, *Senior Vice President*, Mar 2008 – Dec 2008

Responsible for all product development, major focus on developing 3-wheeled electric and hybrid / electric vehicles for consumer use

**McLaren Automotive**, *Executive Director of Engineering*, Mar 2004 – Jan 2007

Responsible for all aspects of engineering and technical integrity for current and future products, focus on mid-engine sports car for Mercedes-Benz, FMVSS 208 compliance for Mercedes-McLaren SLR and future variants, presenting proposals for McLaren branded mid-engine program funding

**Ford Motor Company**, *Chief Engineer*, Jan 2007 – Feb 2004

Responsible for engineering, design, and development of the new Ford GT, directing and organizing a 140 person engineering team, working on low volume “niche” vehicles with compressed timing, directed extensive use of all available computer simulation programs

**Saleen, Inc, Chief, Engineer, Oct 2000 – Jan 2002**

Responsible for all Saleen activity including Mustang development, aftermarket parts, and Motor Sports, Primary for the program to design, develop and produce the Saleen S7, Implemented a Unigraphics V17 CAD network, directed design and development of the S281E package

**DaimlerChrysler Corporation, 2000 NASCAR Winston Cup Program Manager, 1989 – 2000**

Assembled and directed engineering team responsible for the aerodynamic development of the NASCAR Winston Cup Dodge Intrepid, Viper GTS-R program manager, aero-thermal development supervisor, suspension design supervisor, vehicle development specialist, product development engineer

**Chrysler Corporation, Product Development Engineer, 1982 – 1898**

Responsible for research and development projects, directed vehicle testing, high performance driving, vehicle dynamics analysis, installation of test equipment, developed all-wheel drive systems, limited slip differential and rear disc break system, involved in the development of Chrysler Turbo II engine as well as two different turbo 16 valve engine programs

#### Patents

##### Issued

*Powertrain Vehicle, and method with Electric Motors and Dual Belt Drive. U.S. Patent No. 8,276,693 B2,*

#### Degrees

##### Automotive Science

Bachelor of Science in Mechanical Engineering: Automotive option, *General Motors Institute, 1981*

#### Publications

##### Conference Papers

N. Hannemann, S. Syson "A Study of Steering Assemblies for Evaluation, Rating and Improvements of Safety Performance" *DOT HS 806 665; Final Report; Minicars June 1982*

N. Hannemann; R. Schwarz; D. Struble; S. Syson; G. Wallace; S. Forest. "Design and Development of a Modified Production Vehicle for Enhanced Crashworthiness and Fuel Economy" *Phase I Final report; DTHN22-81-C-07085; October 1082*

N. Hannemann. "Driving Expertise n the Vehicle Development Process" *ImechE; September 2006*

#### Motorsports Achievements and Accomplishments

**Speaker:** ImechE conference on Niche Vehicle Development Technology; *September 2006*

**Keynote Speaker:** LS Dyna users conference in Birmingham, U.K.; 2005

**Co-founder:** ViperSpeed race team, 1998

**Design Judge:** Formula SAE competition; 1993, 1994, 2003 and 2007

**SCCA World Challenge Driver Champion:** Driving an Eagle Talon for Archer Motorsports; 1992, 1994 and 1995

**SCCA National Endurance Driver Champion:** Driving a Dodge Shelby Charger for team Shelby; 1985

**Formed and Directed:** Shelby Motorsports; 1987

**Engineering Consultant:** Full Time racing (IMSA GTU), Archer Brothers (Trans Am and World Challenge), and Joe Varde racing (IMSA RS)

**Instructor and Co-author:** Vehicle dynamics section for DaimlerChrysler's "Vehicle Synthesis Awareness" workshop

## Expert Witness Engagements

### Testimony at Trial

Schanel v. Ford, Colorado, December 9-10, 2010

Tichy v. Mercedes, Superior Court of the State of California: Los Angeles County, March 5-6, 2012

Uno v. Toyota, Superior Court of the State of California: Los Angeles County, July 22 & 25, 2013

Uno v. Toyota, Superior Court of the State of California: Los Angeles County, August 21-22, 2013

Bookout/Schwarz v. Toyota, District Court of Oklahoma County: State of Oklahoma, October 15, 2013

Kleperek v. Ford, Circuit Court of the 13th Judicial of the State of Florida: Hillsborough County, November 8-12, 2013

Tarango v. Ford, District Court of Reeves County, Texas, January 10, 2014

Warren v. Ari Makinen Enterprises, Superior Court of California: El Dorado County, June 23-24, 2014

### Testimony at Deposition

Schanel v. Ford, Colorado, September 28, 2010

Funkhouser v. Ford, Circuit Court of Albemarle County, Virginia, October 5, 2010

Runner v. Toyota, Texas

Marchiano v. Kia, Circuit Court of the City of Colonial Heights, Virginia, March 17, 2011

Dick v, DCC, District Court of Colorado: Jefferson County, September 19, 2011

Tichy v. Mercedes, Superior Court of Oklahoma: Oklahoma County, October 19, 2011

Howard/Doyal v. GM, District Court of Oklahoma County: State of Oklahoma, December 7, 2011

Rodriguez v. Ford, Los Angeles, December 20, 2011

Howard/Doyal v. GM, District Court of Oklahoma County: State of Oklahoma, December 22, 2011

Winn v. Magna, Superior Court of California: Shasta County, January 25, 2012

Morris-Kline v. Loman Auto Group, Superior Court of New Jersey: Morris County, June 29, 2012

Houlf v. Toyota, Superior Court of California: Los Angeles County, November 29, 2012

Kleperek v. Ford, Circuit Court of the 13th Judicial of the State of Florida: Hillsborough County, March 28, 2013

Uno v. Toyota, Superior Court of California: Los Angeles County, April 29, 2013

Kramer v. Ford, District Court of Minnesota, June 18, 2013

Warren v. Ari Makinen Enterprises, Superior Court of California: El Dorado County, June 20, 2014

St. John v. Toyota, US District Court of California: Southern District, June 28, 2013

Vance v. Toyota, Circuit Court of Wayne County, Virginia, July 19, 2013

Taylor v. Chrysler, Superior Court of the State of California: Los Angeles County, July 24, 2013

Underwood/Stevens v. Kawasaki, Circuit Court for the 13<sup>th</sup> Judicial Circuit of Alabama: Mobile County, July 31, 2013

Bookout/Schwarz v. Toyota, District Court of Oklahoma County: State of Oklahoma, August 8, 2013

Lacy v. Freightliner, Circuit Court of Mobile County, Alabama, November 13, 2013

Tarango v. Ford, 143rd Judicial District Court of Texas: Reeves County, December 10, 2013

Rubitsky v. BMW, Superior Court of California: Sacramento County, December 18, 2013

Quinlan v. Toyota, Circuit Court for the 15th Judicial Circuit Florida: Palm Beach County, April 24, 2014

Thomas v. Mitsubishi, US District Court of Utah, Central Division, May 1, 2014

Salud v. Catepillar, US District Court of Southern Florida: Miami, June 5, 2014