

## **Robert W. Schmitz**

Chief Executive Officer  
Sabre Engineering, Inc.

### Education and Training:

BS in Industrial Technologies, Colorado State University, Ft. Collins, CO, 1987  
Additional Graduate Courses, Colorado State University, Ft. Collins, CO  
Advanced Vehicle Dynamics Engineering Professional Development Course, SAE  
Multiple Technical Certifications

### Professional Experience

Among his accomplishments, Schmitz is the inventor/author of nine US patents pertaining to advanced hybrid electrical vehicle control.

He started his career as a Systems Engineer for ABB Robotics where he matured his talent and skill in developing electronic control schemes to manage very complex processes. He later moved into the management of design teams and eventually become the North American Product Manager whereby he oversaw the technical development of ABB's robotic systems and integration.

In 1992 Schmitz started Sabre Engineering, Inc as a means to venture into the market for very advanced control systems. He and Sabre provide solutions that evolve from the realm of theoretical niceties and transition into the realm of supportable production.

While leading Sabre he has won more than 60 profitable contracts. He counts himself blessed to work on so many complex and varied programs. From designing the EcoMark hybrid system, to designing and building lunar rovers for NAS, to designing joystick controlled vehicles for the severally handicapped, to double-decker buses for London.

Having developed an ability to manage interdisciplinary teams solving complex technical problems; Mr. Schmitz has now combined his love for automobiles with his proven business acumen and technical skills to focus on the challenge facing the US today; that being clean, affordable, renewable resource dependent transportation.

By combining the technology developed for the U.S. military with the Sabre Tactical vehicle along with Sabre's experience with fuel cells and proprietary HEV technology Schmitz and Sabre are developing a unique HEV vehicle that is well suited for direct commercialization.

Schmitz and Sabre have also built and developed clean-room process controls, designed and built production plant integrations. Schmitz has traveled through out Asia, Europe, and the US supporting Sabre designs. Due to the nature of developing and working with highly sensitive military technologies Schmitz holds an active DoD clearance.

Sabre's current list of clients includes:

Hewlett Packard, Gates Rubber Company, The U.S. Air Force, The United States Special Operations Command, Johnson Controls, NASA, Omega ltd, Pepsi, Environmental Water Systems, Avago Technologies, Agilent and many others.

Schmitz graduated Colorado State University, with a degree in Industrial Technology in 1988. He has furthered his education with many graduate and professional courses ranging from business finance to Advanced Vehicle Dynamics.

He has lectured at various institutions including Denver University, and professional conferences. Schmitz has been featured on CBS news and also on Denver's local KWGN. He and his company have been sought worldwide to provide unique and innovative technical solutions to problems others could not solve.

With additional patent technologies currently under review, Schmitz has invented and authored the following nine U.S. patents:

**US Patent: 7,122,979** – October 17, 2006 - Title: Method and apparatus for selective operation of a hybrid electric vehicle in various driving modes.

**US patent: 7,121,234** – October 17, 2006 - Title: Hybrid electric vehicle and method of selectively operating the hybrid electric vehicle.

**US Patent: 7,071,642** - July 4, 2006 - Title: Method and apparatus for adaptive control of traction drive units in a hybrid vehicle.

**US Patent: 7,017,542** - March 28, 2006 - Title: Hybrid electric vehicle and method of selectively operating the hybrid electric vehicle.

**US Patent: 6,877,576** - April 12, 2005 - Title: Method and apparatus for selective operation of a hybrid electric vehicle power plant.

**US Patent: 6,622,804** - September 23, 2003 - Title: Hybrid electric vehicle and method of selectively operating the hybrid electric vehicle.

**US Patent: 6,573,675** - June 3rd, 2003 - Title: Method and apparatus for adaptive energy control of hybrid electric vehicle propulsion.

**US Patent: 6,483,198** - November 19, 2002 - Title: Hybrid electric vehicle having a selective zero emission mode, and method of selectively operating the zero emission mode.

**US Patent: 6,333,620** - December 25, 2001 - Title: Method and apparatus for adaptively controlling a state of charge of a battery array of a series type hybrid electric vehicle.