Edward M. West

Functional Summary

Engineering Skills include: Systems Engineering, Structural Design, Mechanism Analysis and Design, Heat Transfer Analysis, Component Design, Test System Design, Design of Experiments, Computer Based Testing Software Development, CNC Operation and Setup, Manual Machinist, Supervise Workers, Schedule / Plan / Manage Projects, Write Technical Papers and Reports

Employment

1994 – Current Vehicle Research Institute Bellingham, WA
Research Engineer

Lead the technical development and manufacture of research project prototypes. Develop engineering designs for research prototypes and test equipment using ProEngineer↓ V20. Develop engineering specifications for components and collaborate in the development of manufacturing methods. Carry out complex system analysis using personally developed analysis tools. Work with commercial manufacturers and venders to develop project specific hardware. Specification and procurement of specialized test and measurement equipment.

Education

1993 - 1994 Western Washington University Bellingham, WA
Post Baccalaureate Certificate in Automotive Design - Honors
A one-year program in automotive design for degreed engineers. Includes Advanced Vehicle Design, Automotive Emissions, Aerodynamics, Engine and Power Train Design.

1989 – 1993 University of Florida Gainesville, FL
Bachelors of Science – Mechanical Engineering

Summary of Engineering Qualifications

Extensive system design experience. Specialties include; Heat Transfer Analysis and Thermodynamics, Complex System Design, Materials, Fluid Dynamics, Combustion, Mechanism and Structural Design. Additional skills and experience include; Electric Traction Drive System Development, Automotive Computers and Electronics, Vehicle Controls and Ergonomics, Project Management, Budgeting and Fundraising

Professional Memberships

Society of Automotive Engineers, 1989 to Present

American Society of Mechanical Engineers, 1990 to Present

Patents and Publications

U.S. Patent No. 5,512,109 – Generator with Thermophotovoltaic Cells and Hydrocarbon burner, Issued April 30, 1996. Assignees: Fraas, L. M., Seal M. R. and West E. M.

West, E. M., “Practical Development and thermodynamic modeling of a Complete TPV Generator,” Thermophotovoltaic Generation of Electricity: Third NREL Conference, The American Institute of Physics, CP401, 1997

Seal, M.R., West, E. M., et. al., “A Thermophotovoltaic Generator for use as an Auxiliary Power Unit in a Hybrid Electric Vehicle,” International Symposium on Automotive Technology and Automation, Florence, Italy, Conference Proceedings, 1996

West, E. M. and Campbell, G. A., “The Development of a Chrysler Neon Natural Gas/Electric Hybrid Vehicle at Western Washington University,” SAE Conference Proceedings SP-1170, International conference and Exposition, 1996

Software Skills

ProEngineer Solid Modeling
ProMechanica FEA Modeling
MathCAD
AutoCAD
Microsoft: Word, Excel, PowerPoint, Project