

Design and Optimization of a Mobile Hybrid Electric System to Reduce  
Fuel Consumption

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and  
State University in partial fulfillment of the requirements for the degree of

Master of Science

In

Mechanical Engineering

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May 29, 2015

Blacksburg, Virginia

Keywords: Off-grid power systems, hybrid energy, fuel efficiency

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## Virginia Tech ETD Fair Use Analysis Results

*This is not a replacement for professional legal advice but an effort to assist you in making a sound decision.*

Name: Christopher Del Barga

Description of item under review for fair use: R. Rapier, "The U.S. Navy and Biofuels - Part III," EnergyTrends Insider, 30 October 2010. [Online]. Available: <http://www.energytrendsinsider.com/2010/10/30/the-u-s-navy-and-biofuels-%E2%80%93-part-iii/>. [Accessed 10 March 2015]

Report generated on: 06-28-2015 at : 23:00:19

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

#### **Factor 2**

Your consideration of the nature of the copyrighted work you used weighs: *in favor of fair use*

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Description of item under review for fair use: P. & P. Assistant Secretary of Defense for Operational Energy, "Energy for the Warfighter: Operational Energy Strategy," United States Department of Defense, Washington, DC, 2011.

Report generated on: 06-28-2015 at : 23:06:24

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

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Name: Christopher Del Barga

Description of item under review for fair use: Victron Energy, "Marine Generator Test," Victron Energy, 2007

Report generated on: 06-28-2015 at : 23:21:25

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

#### **Factor 2**

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Report generated on: 06-28-2015 at : 23:27:54

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

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Name: Christopher Del Barga

Description of item under review for fair use: M. Ehsani, Y. Gao and A. Emadi, "Chapter 3: Internal Combustion Engines," in Modern Electric, Hybrid Electric, and Fuel Cell Vehicles: Fundamentals, Theory, and Design - 2nd Edition, Boca Raton, Florida, CRC Press, 2010, pp. 67-104.

Report generated on: 06-28-2015 at : 23:40:26

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

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Name: Christopher Del Barga

Description of item under review for fair use: A. Stiel and M. Skyllas-Kazacos, "Feasibility Study of Energy Storage Systems in Wind/Diesel Applications Using the HOMER Model," Applied Sciences, vol. 2, no. 4, pp. 726-737, 2012

Report generated on: 06-28-2015 at : 23:45:30

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

#### **Factor 2**

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Name: Christopher Del Barga

Description of item under review for fair use: SynQor, Inc., Technical Specification: NQ60W60HGx40, Boxborough, Massachusetts: SynQor, Inc., 2013

Report generated on: 06-28-2015 at : 23:52:14

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

#### **Factor 2**

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Description of item under review for fair use: Image from E. A. Frame, J. Redfield, G. Wendel, V. Iyengar, J. Harris and W. Olson, "M1078 Hybrid Hydraulic Vehicle Fuel Economy Evaluation," US Army TARDEC Fuels and Lubricants Research Facility, Southwest Research Institute (SwRI), San Antonio, Texas, 2012.

Report generated on: 06-29-2015 at : 00:20:54

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

#### **Factor 2**

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Description of item under review for fair use: AM General, "M1097A2 HMMWV Specifications," [Online]. Available: <http://www.amgeneral.com/files/specs-sheet-m1097a2.pdf>. [Accessed 1 April 2015].

Report generated on: 06-29-2015 at : 23:26:05

### **Based on the information you provided:**

#### **Factor 1**

Your consideration of the purpose and character of your use of the copyright work weighs: *in favor of fair use*

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Description of item under review for fair use: General Dynamics Ordnance and Tactical Systems, EFSS: Expeditionary Fire Support System, St. Petersburg, Florida: General Dynamics Ordnance and Tactical Systems, 2008. Used under fair use, 2015.

Report generated on: 06-29-2015 at : 23:27:09

### **Based on the information you provided:**

#### **Factor 1**

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