

Automotive Electric Products – an Industry and Market Analysis

<https://marketpublishers.com/r/A59D90CA354EN.html>

Date: July 2006

Pages: 176

Price: US\$ 4,250.00 (Single User License)

ID: A59D90CA354EN

Abstracts

Print Copy - US\$3,950.00

Single User License - US\$4,250.00

Multi-User License at the Same Location - US\$4,950.00

Lights, heating, ventilation, radiator fans, power windows, and entertainment systems all place electrical "loads" on the car's battery – that is, they draw power from it – and recharging the battery, in turn, places a constant load on the engine. Some cars employ more than 35 electric motors in various ways

Although the electronics content of vehicles is continually increasing, the vehicle market itself is expanding more slowly than in previous years. The net effect is a steady increase in the value of the automotive electronics market as more onboard systems are converted to electrical/electronic systems.

The car industry has become one of the most promising new markets for electric products manufacturers. An increasing number of functions that were traditionally performed by mechanical components manufacturers are now handled by electrical/electronic components manufacturers.

OBJECTIVE

The iRAP study focuses on key automotive electric products, and provides data about the size and growth of the automotive electric products market, company profiles and industry trends. The report provides market in North America, Europe, Japan, China, India, Korea and the rest of the world (ROW) for automotive electric products and potential business opportunities in the future.

The study has a thorough coverage of the underlying economic issues driving the automotive business, as well as assessments of new advanced electric products that companies are developing. Legislative pressures for more safety and environmental protection, as well as users' expectations for improved car functionality, comfort and fuel economies are also covered. The report provides the most thorough and up-to-date assessment that can be found anywhere on the subject. The study also provides extensive quantification of the many important facets of market developments in automotive electric products in the world.

This study explores the proliferation of electrical products into the automotive platform with a special focus on lighting, battery, alternator, starter, switches, ignition systems, wiring harnesses, motors, solenoids, relays, fuses, spark plugs and other products. The report identifies and evaluates automotive electric product markets and technologies with keen potential growth.

The study provides the most complete accounting of automotive electric products market growth in North America, Europe, Japan, Korea and the rest of the world.

SCOPE AND FORMAT

The market data contained in this report quantifies opportunities for automotive electric products. In addition to product types, it also covers the many issues concerning the merits and future prospects of the automotive electric products business, including corporate strategies, information technologies, and the means for providing these highly advanced products and service offerings. It also covers in detail the economic and technological issues regarded by many as critical to the industry's current state of change. The competitive position of the main players in the OEM and aftermarket of automotive electric products market and the strategic options they face are also discussed, as well as such competitive factors as marketing, distribution and operations.

SUMMARY

As consumers demand ever more sophisticated and feature-loaded vehicles, the global automotive industry faces growing challenges to balance these expectations with space constraints and weight concerns. Every component receives scrutiny to determine if it can be made smaller and lighter to promote fuel efficiency and performance and help fit more content into the available space. In addition, vehicle manufacturers and suppliers must increasingly consider environmental concerns such as recyclability, as well as overall performance. Electrical loads in vehicles today are growing every year resulting

in consequent increases in cable harness, power distribution box, relay, and switch ratings, as well as costs.

Big automobile manufacturers are becoming increasingly global and they expect that their specific requirements for supplied products will be fulfilled quickly and flexibly worldwide. This will require presence near the customer. Continued consolidation and increasing global competition are forecast for the automotive electric parts industry. The future prospects for large domestic producers are likely to depend on their ability to obtain contracts with manufacturers, as well as to retain contracts with big OEMs against competition from overseas suppliers. For smaller second- and third-tier suppliers, the key is likely to be establishing strong relationships with primary suppliers.

Report Highlights

Automotive electric products market growth will continue despite slowing auto sales and production.

The worldwide automotive electric products market will reach \$74 billion in 2006 and will continue to grow at an AAGR of 8.1% to reach \$110 billion by 2011.

From 2006 to 2011, electric motors, switches, etc. will show the highest growth rate, 11%, followed by ignition system at an AAGR of 9.3 %, and lighting and battery at 7.7%.

The automotive electrical products business is an OEM business as well as consumer aftermarket. It requires modest technology for manufacturing, so there are a large number of players besides tier-one suppliers, and there is stiff price competition for all the ten automotive electric products.

Contents

INTRODUCTION

Study Goal and Objectives
Reasons for the Study
Contributions of the Study and for Whom
Scope and Format
Methodology
Information Sources
Author's Credentials

EXECUTIVE SUMMARY

Summary Table Global Market for Automotive Electric Products by Product Segments, Through 2011 (\$ Billions) Xix
Summary Figure Global Market of Automotive Electric Products by Product Segment Through 2011 (\$ Billions)

OVERVIEW

Table 1 Average Power Consumption in Heaters, Lamps and Motors in Automotives (WATTS)

Definitions

Electrical System

Automobile Electrical Parts

- 1) lighting
- 2) battery
- 3) alternator and Voltage Regulators
- 4) starter
- 5) control Devices (switches)
- 6) ignition Systems
- 7) wiring Harnesses, Cables
- 8) Motor
- 9) solenoids , Relays, Fuses

Table 2 Number of Relays Used in Vehicle in Automotives

10) Sparkplugs

10.1) Horn

Description of Electrical Functions in Cars

Battery Function
Starter Function
Charging System

TECHNOLOGY

Lighting
Xenon Light
Halogen Headlamps
led Technology in Rear Lamps
Table 3 Automotive Electric Lighting Technology, 2006
Battery
Table 4 Automotive Battery by Technology, 2006
Alternators
Operation
Table 5 Automotive Alternators by Technology, 2006
Starter Integrated With Solenoid
Starting Relay
Starting Switch
Starting System
Solenoid
Starter Solenoid
Table 6 Automotive Starter by Technology, 2006
Switches & Sockets
Multi-function Switches
Power Window Switch
Table 7 Automotive Switches by Technology, 2006
Ignition Systems
Table 8 Automotive Ignition by Technology, 2006
Wiring
Connectors
Table 9 Automotive Wiring and Cables by technology, 2006
Electric Motors
Current and Near Future Electric Motor Applications
Permanent Magnet Motors
Brush Type Permanent Magnet Motor
Brushless Type Permanent Magnet Motor
Permanent Magnet Materials
Induction Motors

Switched Reluctance Motors

Integrated Starter Alternator (ISA) Concept

ISA System Description

Table 10 Automotive Motors by Technology, 2006

Solenoids, Relays, Fuses

Solenoids

Table 11 Automotive Solenoids by Technology, 2006

Relays

Operation

Table 12 Automotive Relays by Technology, 2006

Fuses

Table 13 Automotive Uses by Technology, 2006

Spark Plugs, Resistors, Capacitors, Heaters

Spark Plugs

Table 14 Automotive Spark Plugs by Technology, 2006

Resistors

Table 15 Automotive Resistors by Technology, 2006

Ignition Capacitor

Table 16 Automotive Capacitors by Technology, 2006

Heater

GLOBAL STANDARDS AND REGULATIONS FOR AUTOMOTIVE ELECTRIC PRODUCTS

Industry Standards

Country-specific Standards: United States

Country Specific Standards: European Union

Country Specific Standards: Japan

Other Standards

INDUSTRY OVERVIEW

Table 17 top Five Mega-suppliers of Automotive Electric Products

Market and Supplier Analysis

Table 18 Market Summary by Product Types Through 2011 (\$ Billions) 56

Table 19 Product Suppliers of Automotive Electric Products in 2006

Table 20 Market Summary by Parts Segment Through 2011 (\$ Billions)

Original Equipment Suppliers

Aftermarket Suppliers

Global Aftermarket of Electrical Products

Market Summary by Region Through 2011

Table 21 Global Market for Automotive Electric Products (includes After Market) by Region Through 2011 (\$ Billions) 62

Figure 1 Global Parts Market for Automotive Electric Products (includes Aftermarket) by Region in 2006 and 2011 63

Overview of North America Automotive Electric Products Market

Table 22 Market Summary of Automotive Electric Products in North America Through 2011 (\$ Billions)

Overview of European Automotive Electric Product Market

Table 23 Market Summary of Automotive Electric Products in Europe Through 2011 (\$ Billions)

Overview of Japanese Automotive Electric Product Market

Table 24 Market Summary of Automotive Electric Products in Japan Through 2011 (\$ Billions)

Automotive Parts Suppliers in High Cost Countries (north America, Europe, Japan)

Overview of Chinese Automotive Electric Products Market

Table 25 Market Summary of Automotive Electric Products in China Through 2011 (\$ Billions)

Overview of Korean Automotive Electric Product Market

Table 26 Market Summary of Automotive Electric Products in Korea Through 2011 (\$ Billions)

Overview of the Rest of the World Automotive Electric Products Market

Table 27 Market Summary of Automotive Electric Products, Rest of World Through 2011 (\$ Billions)

Supply Chain Analysis

Procurement Structure of Auto Parts

Distribution Route of Replacement Parts

Japan

Other Countries Parts Suppliers

Modules and Systems

Competitive Strategies

Market VS Technology Driven

Partnerships and Consolidation

Table 28 Company Relations, Licensing, Acquisitions, Merges in Global Automotive Electric Product Industry, 2001-2005 83

MARKET SEGMENTS

Original Equipment Suppliers

Aftermarket Suppliers

Table 29 Global Aftermarket of Automotive Electric Products by Region Through 2011 (\$billions)

Table 30 Global Aftermarket Summary of Automotive Electric Products Through 2011 (\$ Billions)

Product Growth

Lighting

Table 31 Summary of Global Market of Automotive Lighting Through 2011 (\$ Billions)

Battery

Table 32 Summary of Global Market of Automotive Batteries Through 2011 (\$ Billions)

Alternator

Table 33 Summary of Global Market of Automotive Alternators Through 2011 (\$ Billions)

Starter

Table 34 Summary of Global Market of Automotive Stators Through 2011 (\$ Billions)

Switches and Instrument Cluster

Table 35 Summary of Global Market of Automotive Switches Through 2011 (\$ Billions)

Ignition System Including Coils and Distributor Box

Table 36 Summary of Global Market of Automotive Ignition Systems Through 2011 (\$ Billions)

Wiring Harnesses, Junction Boxes, Connectors, and Cables

Advantages of Distributed Architecture

Table 37 Summary of Global Market for Automotive Wiring Harness and Cables Through 2011 (\$ Billions)

Motors

Table 38 Summary of Global Market of Automotive Wiper Motors and Actuators Through 2011 (\$ Billions)

Solenoids, Relays, Fuses

Table 39 Summary of Global Market of Automotive Solenoids, Relays and Fuses Through 2011 (\$ Billions)

Spark Plugs, Horns, Heaters, Blowers, Fans

Table 40 Summary of Global Market of Automotive Spark Plugs, Horns and Heaters Through 2011 (\$ Billions) 97

PATENTS AND PATENT ANALYSIS

List of Patents

Patent Analysis

Patents by Types of Components

Table 41 Number of us Patents Granted for Automotive Electric Products by Type, 2001 Through 2005

Table 42 top 36 Companies by Number of us Patents Granted for Automotive Electric Products, 2001 Through 2005

Table 43 Number of us Patents Granted to Companies by Group for Automotive Electric Components From 2001 Through 2005

Figure-2 top 36 Companies in Terms of us Patents Granted for Automotive Electric Component From 2001 to dec 2006

Automotive Electric Products us Patent Activity

International Overview of Patent Activity

Table 44 Number of us Patents Granted by Assigned Country/region for Automotive Electric Products From 2001 Through 2005

APPENDIX-1

Justification of Market Data (by Products, by Region, by Technology) in 2006 and Market Forecast of 2011 of World Automotive Electric Products

Table 45 Basis of Calculation of Global Market of Automotive Electric Products, Through 2010

Table 46 Basis of Calculation of Global Market of Automotive Electric Products - by Product Type (oe Only)

Table 47 Basis of Calculation of Global Market of Automotive Electric Products – by Product (aftermarket Only)

Table 48 Basis of Calculation of Global Market of Automotive Electric Products - by Region (OE Only)

Table 49 Basis of Calculation of Global Market of Automotive Electric Products - by Region (aftermarket Only)

APPENDIX II - AFTERMARKET ANALYSIS

Aftermarket Suppliers

Classification of Automotive Parts

Japan

Table 50 Classifications of Automotive Parts – Japanese Definitions

United States

Europe

Global Market Characteristics Comparison of Replacement Parts

Table 51 Global Market Characteristics of Replacement Automotive Batteries

Table 52 Global Market Characteristics of Replacement of Auto Bulbs

Table 53 Global Market Characteristics of Replacement of Automotive Spark Plugs

COMPANY PROFILES

Aisin AW Co., Ltd
Alcoa Fujikura
Alps Automotive, Inc.
Arvin Meritor
Asmo CO Ltd
Automotive Lighting
Beru AG
Continental Temic
Continental Isad Electronic Systems Gmbh & Co
Delphi
Denso Corporation
Exide Technologies
Faurecia
Federal-mogul Corporation
Fuji. Electric Device Technology
Gentex Corporation
Hella Kga Hueck & Co.
Hitachi Automotive Systems (HAS)
Japan Storage Battery co Ltd
Jidosha Denki Kogyo (JIDECO)
Johnson Controls
Automotive Group
Johnson Electric Automotive Motors
Koito Manufacturing CO Ltd.
Lear Corporation
Mabuchi
Mitsuba
Mitsubishi Electric Automotives
ngk Spark Plugs (USA.), Inc.
Nichia Corporation
Nippon Seiki
Omron Corporation
Osram Opto Semiconductors Gmbh
Panasonic ev Energy Co., Ltd

Philips Lighting Company
Remy International, Inc.
Robert Bosch Gmbh
Saft America, Inc.
Saia Burgess
Shenghuabo Group Co., Ltd China, Shangha Company
Shin-kobe Electric Machinery co. Ltd.
Siemens vdo Automotive
SPAL
Stoneridge Inc
Sumitomo Wiring Systems Ltd.
Tokai Rika
trw Automotives
Valeo Inc.
Visteon Corporation
Yazaki Buhin K.K.

List Of Tables

LIST OF TABLES

Summary Table: Global Market for Automotive Electric Products by Product Segments, Through 2011 (\$ Billions)

Table 1 Average Power Consumption in Heaters, Lamps and Motors in Automotives (WATTS)

Table 2 Number of Relays Used in Vehicle in Automotives

Table 3 Automotive Electric Lighting by Technology, 2006

Table 4 Automotive Battery by Technology, 2006

Table 5 Automotive Alternators by Technology 2006

Table 6 Automotive Starter by Technology, 2006

Table 7 Automotive Switches by Technology, 2006

Table 8 Automotive Ignition System by Technology, 2006

Table 9 Automotive Wiring and Cables by Technology, 2006

Table 10 Automotive Motors by Technology, 2006

Table 11 Automotive Solenoids by Technology, 2006

Table 12 Typical Automotive Relays by Technology, 2006

Table 13 Automotive Fuses by Technology, 2006

Table 14 Automotive Sparkplugs by Technology, 2006

Table 15 Automotive Resistors by Technology, 2006

Table 16 Automotive Capacitors by Technology, 2006

Table 17 top Five Mega-suppliers of Automotive Electric Products

Table 18 Market Summary by Product Types Through 2011 (\$ Billions)

Table 19 Product Suppliers of Automotive Electric Products in 2006

Table 20 Market Summary by Parts Segment Through 2011 (\$ Billions)

Table 21 Global Market for Automotive Electric Products (includes After Market) by Region Through 2011 (\$ Billions)

Table 22 Market Summary of Automotive Electric Products in North America Through 2011 (\$ Billions)

Table 23 Market Summary of Automotive Electric Products in Europe Through 2011 (\$ Billions)

Table 24 Market Summary of Automotive Electric Products in Japan Through 2011 (\$ Billions)

Table 25 Market Summary of Automotive Electric Products in China Through 2011 (\$ Billions)

Table 26 Market Summary of Automotive Electric Products in Korea Through 2011 (\$ Billions)

Table 27 Market Summary of Automotive Electric Products, Rest of World Through 2011 (\$ Billions)

Table 28 Company Relations, Licensing, Acquisition and Mergers in Global Automotive Electric Product Industry, 2001-2005

Table 29 Global Aftermarket of Automotive Electric Products by Region Through 2011 (\$ Billions)

Table 30 Global Aftermarket of Automotive Electric Products Summary Through 2011 (\$ Billions)

Table 31 Summary of Global Market of Automotive Lighting Through 2011 (\$ Billions)

Table 32 Summary of Global Market of Automotive Batteries, Through 2011 (\$ Billions)

Table 33 Summary of Global Market of Automotive Alternators Through 2011

Table 34 Summary of Global Market for Automotive Stator Through 2011 (\$ Billions)

Table 35 Summary of Global Market for Automotive Switches Through 2011 (\$ Billions)

Table 36 Summary of Global Market of Automotive Ignition System Through 2011 (\$ Billions)

Table 37 Summary of Global Market for Automotive Wiring Harnesses and Cables Through 2011 (\$ Billions)

Table 38 Summary of Global Market of Automotive Wiper Motors and Actuators Through 2011 (\$ Billions)

Table 39 Summary of Global Market of Automotive Solenoids, Relays, and Fuses, Through 2011 (\$ Billions)

Table 40 Summary of Global Market Ofautomotive Spark Plugs, Horns, Heaters, Through 2011

Table 41 Number of us Patents Granted for Automotive Electric Products by Type, 2001 Through 2005

Table 42 Top 36 Companies by Number of us Patents Granted for Automotive Electric Products, 2001 Through 2005

Table 43 Number of us Patents Granted to Companies by Group for Automotive Electric Components From 2001 Through 2005

Table 44 Number of us Patents Granted by Assigned Country/region for Automotive Electric Products From 2001 Through 2005

Table 45 Basis of Calculation of Global Market of Automotive Electric Product, Through 2010

Table 46 Basis of Calculation of Global Market for Automotive Electric Products - by Product Type (oe Only)

Table 47 Basis of Calculation of Global Market for Automotive Electric Products – by Product (aftermarket Only)

Table 48 Basis of Calculation of Global Market for Automotive Electric Products - by Region (OE Only)

Table 49 Basis of Calculation of Global Market for Automotive Electric Products - by Region (aftermarket Only)

Table 50 Classifications of Automotive Parts – Japanese Definitions

Table 51 Global Market Characteristics of Replacement Automotive Batteries

Table 52 Global Market Characteristics of Replacement of Auto Bulbs

Table 53 Global Market Characteristics of Replacement of Auto Sparkplugs

List Of Figures

LIST OF FIGURES

Summary Figure: Global Market of Automotive Electric Products by Product Segment Through 2011 (\$ Billions)

Figure 1 Global Parts Market for Automotive Electric Products (includes Aftermarket) by Region in 2006 and 2011

Figure-2 Top 36 Companies in Terms of us Patents Granted for Automotive Electric Component From 2001 to dec 2006

I would like to order

Product name: Automotive Electric Products – an Industry and Market Analysis

Product link: <https://marketpublishers.com/r/A59D90CA354EN.html>

Price: US\$ 4,250.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/A59D90CA354EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970