Trinity PowerMax™ Motor Generator Chargeback Technology and the Automotive Industry

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Introducing Breakthrough Technology combined with existing and new technology that overcomes all of the drawbacks presented by the Internal Combustion Engine.

- Longer range up to 600 miles on one charge; longer with hybrid and fuel cell systems and other improved technologies
- Convenience of refueling at home, while shopping, while at work or anywhere there is availability of an electric outlet utilizing onboard charging
- Minimal emission of pollutants
- No dependence on foreign oil
- Faster more powerful vehicles
- Petroleum Equivalency Value of 325 plus gallons per mile
- Substantially less maintenance. No oil changes, tune ups etc
- Power source (motor) life of 5 to 10 years (motor)
- No underground gasoline storage tanks (pollutes the ground)

"The prediction I can make with the highest confidence is that the most amazing discoveries will be the ones we are not today wise enough to foresee."   Carl Sagan *Billions and Billions*

"Any sufficiently advanced technology is indistinguishable from magic." Arthur C. Clarke

Introduction

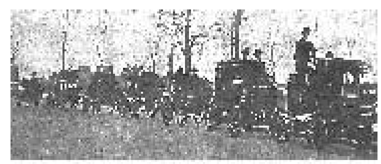
Gasoline prices are rising rapidly. Nevertheless, more and more internal combustion vehicles are being sold and there are fears of a gas shortage. Experts predict that prices will continue to rise since proven reserves of petroleum are limited. Electric vehicle enthusiasts urge more emphasis on electric cars and trucks, since these will become more competitive as gas prices rise. They also point out the nonpolluting aspects of their technology. Business and government are being urged to push the electric vehicle, while conferences and associations are formed to coordinate this work. The electric enthusiasts are impatient that more is not being done to support electric vehicles, but they are convinced that such support must grow in the future…**The year is 1912.**

History

Sometime between 1832 and 1839 Robert Anderson of Scotland invented the first crude electric carriage. Professor Stratingh of Holland built an electric car in 1835. American Thomas Davenport and Scotsman Robert Davidson around 1842 developed more practical electric road vehicles. Frenchmen Gaston Plante and Camille Faure of France developed improved storage batteries between 1865 and 1881, paving the way for electric vehicles to flourish.

The first production electric vehicle creates a sensation in 1892 when exhibited in Chicago.

In 1899 the world record for land speed of 68 mph was set by a Belgian built electric car designed by Camille Jénatzy.


New York City Electric Taxis

In 1981 American A. L. Ryker built an electric tricycle and William Morrison built a six-passenger wagon. Many innovations followed and interest in motor vehicles increased greatly in the late 1890s and early 1900s. In 1897, the first commercial application was established as a fleet of New York City taxis built by the Electric Carriage and Wagon Company of Philadelphia. By 1901 they operated 230 electric vehicles responding to an average of 200 calls per day covering more than 700 miles.


1902 Wood's Electric Phaeton

The early electric vehicles, such as the 1902 Wood's Phaeton (top image), were little more than electrified horseless carriages and surreys. The Phaeton had a range of 18 miles, a top speed of 14 mph and cost $2,000. Later in 1916, Woods invented a hybrid car that had both an internal combustion engine and an electric motor.

By the turn of the century, America was prosperous and cars, now available in steam, electric, or gasoline versions, were becoming more popular. The years 1899 and 1900 were the high point of electric cars in America, as they outsold all other types of cars. Electric vehicles had many advantages over their competitors in the early 1900s. They did not have the vibration, smell, and noise associated with gasoline cars. Changing gears on gasoline cars was the most difficult part of driving, while electric vehicles did not require gear changes. While steam-powered cars also had no gear shifting, they suffered from long start-up times of up to 45 minutes on cold mornings. The steam cars had less range before needing water than an electric's range on a single charge. The only good roads of the period were in town, causing most travel to be local commuting, a perfect situation for electric vehicles, since their range was limited. The electric vehicle was the preferred choice of many because it did not require the manual effort to start, as with the hand crank on gasoline vehicles, and there was no wrestling with a gear shifter.

By 1910 there were twenty companies producing 6,000 electric vehicles per year. They were highly reliable, clean, quiet, didn't require gear changing or coordinating spark advance with throttle, and were easy to start, becoming a great favorite with the women. Both Mina Edison and Clara Ford drove electric vehicles. Electric vehicles enjoyed success into the 1920s with production peaking in 1912.

The 1903 Krieger featured front wheel drive, electric-gasoline hybrid power and power steering. A gasoline engine supplemented the battery pack. Between 1890 and 1910, there were many hybrid electric cars and four wheel drive electric cars. Electric cars were more expensive than gasoline cars and electrics were considered more reliable and safer. With the development of the starter motor for gasoline cars and increased range of gasoline cars with numerous fueling stations, public interest switched from electrics to gasoline by 1915.

The decline of the electric vehicle was brought about by several major developments:

- By the 1920s, America had a better system of roads that now connected cities, bringing with it the need for longer-range vehicles
- The discovery of Texas crude oil reduced the price of gasoline so that it was affordable to the average consumer
- The invention of the electric starter by Charles Kettering in 1912 eliminated the need for the hand crank
- The initiation of mass production of internal combustion engine vehicles by Henry Ford made these vehicles widely available and affordable in the $500 to $1,000 price range. By contrast, the price of the less efficiently produced electric vehicles continued to rise. In 1912, an electric roadster sold for $1,750, while a gasoline car sold for $650
- Rockefeller and Standard Oil were searching for a new market base for petroleum as the light bulb and electrification of cities and towns in America displaced the demand for kerosene lighting. Gasoline was a byproduct of the refining process which was discarded in the early days. Rockefeller, a master at horizontal and vertical marketing, developed an infrastructure of dispensing service stations that conveniently promoted and served the gasoline internal combustion vehicles. Today gasoline is available at least every thirty miles along the interstate highway system even in the remotest locations in America.
- Standard Oil of California along with General Motors, Firestone Rubber, Phillips Petroleum and Mack Truck collaborated on a project called National City Lines, which proceeded to take over all of the public transportation systems in the country. Electric streetcars and trolleys were replaced with motorized buses, selling the bus and auto to businessmen and politicians across the county. Ultimately they were found guilty of violating anti-trust laws but the $5,000 fine imposed didn't even amount to the profits achieved with one street car conversion. This erased clean inexpensive public transportation from most all cities in America with the exception of New York, Philadelphia, and Chicago. San Francisco's Cable Car system, has survived at least four separate attempts to

dismantle, and although today is still a viable transportation system, operates mainly as a tourist attraction

- The power companies interestingly enough did not promote transportation as a customer for their power. They were more interested in fostering the use of home appliances (especially resistive ones like toasters and irons) for increasing the consumption of electricity

State of the EV Industry

With mandates from government all of the world's major automobile manufacturers, as well as several independent small businesses, now have made electric vehicles (EVs) available to the marketplace. Since 1996, a total of 4,339 battery electric vehicles (BEVs) have been leased and/or sold in the United States. Companies have begun to develop and market low-speed (LSV), or neighborhood (NEV), BEVs for use on streets with speed limits of 35 mph or less. These companies have seen interest from the large automakers as states are including them in their quotas for zero emission vehicles. To date, approximately 6,570 have been sold. Most notable of these is LIDO (Lee Iacocca's first name and fronted by same) in Palm Desert, California. In addition, there is growing use of non-road and industrial EVs in airports, resorts and other businesses requiring onsite transportation.

Hybrid electric vehicles (HEVs) also are making inroads in the marketplace. Honda and Toyota have leased and/or sold over 17,773 HEVs in the United States, and other automobile manufacturers have announced plans to introduce hybrids into the marketplace within the next two to three years.

Industry is providing significant investments for all of these electric transportation technologies, but the federal government -- specifically the U.S. Department of Energy -- has an important role to play in helping to assure that these technologies are developed and brought forth from the laboratories into the marketplace.

No car company will be able to thrive in the 21st century if it relies solely on internal combustion engines…Issues such as global climate warming, clean air and energy conservation demand fundamental changes from all industries in all nations.

Jack F. SmithJr.
Chairman
General Motors

…at some point we've got to realize that you're going to have to face up to a new millennium for the young people that is going to be an electric world and you can quote me on that…I said that…there will be an electric something in every garage within a year or two.

Lee Iococca
Chairman and CEO
EV Global Motors

Forecasts

Sales of electric vehicles are forecast to advance 60 percent annually (from a very small base) to 2.5 million vehicles in the year 2009, valued at $45 billion. This will account for about four percent of total worldwide motor vehicle sales. Growth will be spurred primarily by continued strong sales for hybrid electric vehicles, which were introduced for the first time in commercial quantities in 1998.

World Electric Vehicles Demand					
Item	1999	2005	2009	Annual Rate of Growth (%)	
				April 1999	April 2009
World Population (millions)	5,985	6,351	6,722	1.2	1.1
Vehicles per Capita	.12	.13	.13	--	--
World Motor Vehicles in Use (millions)	724	799	880	2.0	2.0
Electric Vehicles per Million Vehicles	90	1,921	9,606	84.5	38.0
Electric Vehicles in Use (thousands)	65	1,535	8,455	88.2	40.7
World Motor Vehicle Sales	56,340	60,650	66,265	1.5	1.8
Percent of Sales Electric	--	1.3%	3.8%	99.6	24.0
World Electric Vehicle Sales (thousands of Units)	23	785	2,510	102.6	26.2
Sales per Electric Vehicle (thousands)	$28.2	$21.1	$17.8	-5.7	-3.4
World Electric Vehicle Sales (millions)	$650	$16,550	$44,600	91.1	21.9

Discussion

Historically, environmental issues have been the most important factor driving the growth in electric vehicle sales and availability. Regulations have been enacted in many nations to reduce air pollution. Examples include specific EV sales mandates in a few states in the US, restrictions on the use of conventional internal combustion vehicles in a number of congested European city centers at certain times and government anti-pollution efforts in places as far-flung as San Jose, Costa Rica; Beijing, China; Mexico City, Mexico and New Delhi, India. However, technological problems (primarily related to battery technology), economic factors (vehicle costs) and convenience issues (lack of range and the need to constantly recharge EVs), have seriously impacted the prospects for widespread EV acceptance. The introduction of the first hybrid EVs has altered the situation dramatically, as these vehicles look and perform like conventional cars, overcoming the inherent drawbacks of previous electric vehicles.

Hybrid vehicles combine a small gasoline engine with an electric motor, achieving significantly lower emissions (and higher gas mileage) than internal combustion vehicles while eliminating range limitations and the need to recharge batteries regularly from an outside source. Although there are only two hybrids (the Toyota PRIUS and Honda INSIGHT) in commercial production now, virtually every automaker is planning to adapt hybrid technology to existing models, and by 2009 there could easily be 15 to 20 models available which utilize hybrid drive systems.

Advantages-

- Less emissions than conventional internal combustion powered vehicles
- Petroleum equivalency value of 40 to 90 miles per gallon
- Now technology
- Longer Range than battery only powered vehicles
- Gasoline refueling infrastructure well in place

Disadvantages –

- Higher price than conventionally powered vehicles
- Tailpipe emissions due to onboard internal combustion engines

The American Auto makers are leaning towards this technology. Toyota and Hondas selling of tens of thousands of Hybrids has the big three concerned about losing yet another fast moving market to the Japanese. In a recent speech, Ford's chairman William Clay Ford Jr. said, “Hybrid technology is one that has great appeal because we don't have to really invent anything; we know they work. If these vehicles don't get customer acceptance, I really don't know what we do next."

Fuel cell vehicles are also expected to be commercialized in significant numbers by 2009. These are true electric vehicles, in that no combustion takes place, as the fuel cell creates electricity by combining hydrogen and oxygen and creates virtually no emissions at all. Like hybrids, these vehicles have no range restrictions and do not need to be recharged. Although the vehicles sold up to now are only test and demonstration vehicles, there will be at least eight to ten commercially produced fuel cell vehicles on the road by 2009.

Advantages –

- Byproduct of use is water vapor
- Petroleum equivalency of around 160 miles per gallon
- Quiet operation
- Pure electric onboard power source

Disadvantages –

- Requires some combustion to extract hydrogen from petroleum derivatives
- Not fully developed technology will take up to 15 years or more before commercially viable
- Still requires batteries for energy bursts and storage
- High volatility of stored hydrogen
- No existing infrastructure to support refueling BP estimates cost from $500,000 to $1,000,000.for a single fueling station
- Lack reliability and durability. Testing for automobiles indicates they start losing efficiency and break down after about 20,000 miles
- Low power output. It takes about 175 cells to generate 75 kilowatts which equals the 100 hp produced by a four-cylinder internal combustion engine

- High Cost – 10 times more than a conventional power train
- No manufacturing infrastructure. There are no machines capable of mass producing fuel cell stack in the quantity and at a speed that would enable high-volume auto production

Excerpt from State of The Union Address
President George W. Bush
January 28, 2003

Our third goal is to promote energy independence for our country, while dramatically improving the environment.
I have sent you a comprehensive energy plan to promote energy efficiency and conservation, to develop cleaner technology, and to produce more energy at home. I have sent you Clear Skies legislation that mandates a 70 percent cut in air pollution from power plants over the next 15 years......I urge you to pass these measures, for the good of both our environment and our economy. Even more, I ask you to take a crucial step, and protect our environment in ways that generations before us could not have imagined. In this century, the greatest environmental progress will come about, not through endless lawsuits or command and control regulations, but through technology and innovation. Tonight I am proposing 1.2 billion dollars in research funding so that America can lead the world in developing clean, hydrogen-powered automobiles.
A simple chemical reaction between hydrogen and oxygen generates energy, which can be used to power a car – producing only water, not exhaust fumes. With a new national commitment, our scientists and engineers will overcome obstacles to taking these cars from laboratory to showroom – so that the first car driven by a child born today could be powered by hydrogen, and pollution-free. Join me in this important innovation – to make our air significantly cleaner, and our country much less dependent on foreign sources of energy.

Battery powered vehicles, on the other hand, would appear to be doomed to continued life as a niche product only. While these vehicles are clean and quiet, storage battery limitations will prevent them from becoming a factor in the larger motor vehicle industry, or even in the much smaller electric vehicles market. As the result of zero emission vehicle (ZEV) mandates in the US and government subsidies abroad, demand will expand through 2009.

Advantages –

- Zero emissions
- Quiet operation
- No gears to shift
- More efficient power transmission to wheels (less power loss)
- Petroleum equivalency value of 325 miles per gallon
- Electricity recharging is everywhere
- Start and stop operation has no effect on maintenance and vehicle is not consuming energy when it is stopped

Disadvantages –

- Range – Currently 80 to 160 miles
- Length of time to recharge batteries
- Batteries have Limited Life
- Batteries are subject to Narrow Operating Temperatures requiring heating or cooling in temperature extremes
- High Cost of Batteries

Neighborhood Electric Vehicles (NEVs) also called Low Speed Vehicles (LSVs) are currently produced by several manufacturers. These vehicles are basically glorified golf carts featuring turn signals, rear view mirrors, seat belts and are entirely powered from batteries. Many states have passed legislation to allow these vehicles to operate on streets of 35 mph or less. Also states are allowing these vehicles to count in the quotas for zero emission vehicles which has fostered interest from the major auto manufacturers, as in the case of California, which has legislated a fine of $5,000 for every vehicle sold that doesn't meet the 10% of sales quota (ie of every 10 vehicles sold in California one must be a ZEV.)

Advantages –

- Ideally suited for short trips to work or shopping, especially in majority of American suburbs and inner cities. (not necessary to power up the gas guzzling hydrocarbon emitting SUV to drive three blocks to the convenience store.) Vehicles could even be accommodated on urban freeways using a specially designated and separated lane similar to High Occupancy Vehicle (HOV) lanes of today
- Very efficient start and stop operation. Not only ideal as second vehicle for personal use but also well suited for things such as mail delivery in urban and suburban environments, and onsite transportation such as airports and resorts
- Take up less parking area and can be parked in priority spaces in shopping and work environments to encourage their use. These spaces could even feature coin or card operated charging stations while the owner is shopping or working

Disadvantages –

- As they are purely battery operated they share some of the disadvantages of battery vehicles. However due to the lesser performance requirements these disadvantages are not quite as pronounced

The number of electric vehicles in use will advance more than 60 percent annually, from a base of 65,000 vehicles in 1999 to 8.5 million vehicles in the year 2009. Sales of the Toyota PRIUS, introduced in Japan in 1998 and available only there until 2000, totaled more than 33,000 by year-end 1999. Another 9,000 or so of the vehicles in use in 2000 were obsolete electric milk trucks used in the UK. The remainder were battery powered electric vehicles manufactured by major producers such as Ford, General Motors or Peugeot; small numbers of hybrid and fuel cell test vehicles (many of which are buses) and a large fleet of privately owned cars manufactured by specialty producers and conversion companies. Almost overnight, however, this will change, as the new hybrid vehicles immediately come to dominate the total EV fleet, driven by strong sales of the Honda INSIGHT and Toyota PRIUS.

There are currently between 50 and 100 companies engaged in manufacturing electric vehicles worldwide. Most of these companies produce a relatively small number of vehicles annually, and are primarily in the business of building (or converting) electric vehicles exclusively. However, these companies are rapidly being relegated to irrelevance as the major international automakers enter the fray. With their global production and distribution networks, established and familiar brand names and huge capital advantages, these competitors will easily seize control of the electric vehicle market, particularly in the hybrid and fuel cell segments of the market. Since major motor vehicle producers such as DaimlerChrysler, Ford, General Motors, Honda and Toyota don't really see a significant future for battery powered electric vehicles, that segment of the market will be largely left to the smaller niche producers.

The success of the internal combustion engine as the preferred power source for motor vehicles seems as much social and cultural rather than practical. Average daily vehicular mileage in the U.S. is reported as 20 miles per day which is well within the range of battery powered electric vehicles. It seems to be more of a perceived need for freedom than an issue of practicality. Certainly with the preponderance of multiple vehicle households one could be internal combustion powered and the other electrical powered each with their own uses. Today's ranges for IC powered vehicles is around 300 miles, only double that of existing electric vehicle technology. This was brought about by installation of smaller fuel tanks by auto manufacturers in order to reduce weight and meet federally mandated fuel economy standards.

The chart below illustrates the point of average vehicle trip lengths:

TABLE 5.37

AVERAGE VEHICLE TRIP LENGTH[1] BY VEHICLE TYPE AND TRIP PURPOSE
1990 NPTS
(MILES)

Vehicle Type	Earning a Living	Family and Personal Business	Civic, Educational and Religious	Social and Recreational	Other	ALL
Auto	10.9	6.2	7.5	11.4	11.5	**8.7**
Passenger Van	10.6	7.2	5.1	14.1	4.6	**9.2**
Cargo Van	17.6	9.5	14.4	14.8	10.0	**14.2**
Pickup Truck	12.1	7.4	8.1	13.1	10.6	**10.3**
Other Truck	25.0	8.6	2.0	7.8	**	**15.9**
RV/Motor Home	1.6	11.7	**	59.3	**	**24.8**
Motorcycle	6.2	8.1	6.6	15.5	**	**11.2**
Moped	8.6	2.0	0.9	2.1	**	**3.8**
Other POV	0.3	14.1	**	8.1	8.2	**12.2**
ALL	**11.2**	**6.5**	**7.5**	**11.8**	**10.8**	**9.0**

[1] Information based on observations that had valid trip mile information.

** Indicates no data reported.

Some Thoughts

Billions have been spent on improving the efficiency of IC engines while virtually nothing has been done to improve the efficiency of electric motors. The AC induction motor exists and operates today as it did in 1908.

Electric traction motors are far more efficient than IC motors as they put the power source to the power application without the need for transmissions, rear ends or drive shafts as evidenced by their use in Locomotives and Submarines for over ½ a century.

Automobile companies operate way behind existing technology evidenced by things such as superior disk braking systems which were used on aircraft in the late twenties, but didn't show up in automobiles until the eighties. The Tucker Automobile in the late forties is another example of this vastly improved technology.

With the demand for quarterly profits in today's corporate world there is little incentive for auto manufacturers to engage in the R&D necessary to make alternative fuel vehicles viable. Likewise with motor manufacturers.

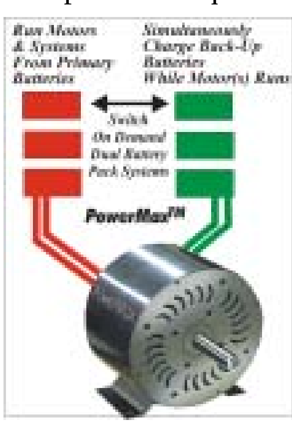
The four field electric motor development is analogous to the development of IC motors from single cylinder to multiple cylinder engines.

Much attention is given to developing alternative fuel sources with little attention given to improving the power unit.

Enter Breakthrough Technology

In a small lab in the Northern Catskills of New York State inventor Gordon James has developed a new motor called the PowerMax™. This motor is the first radical departure from standard motor configuration in 100 years. As a result the motor offers the following 'firsts' in motor design and performance:

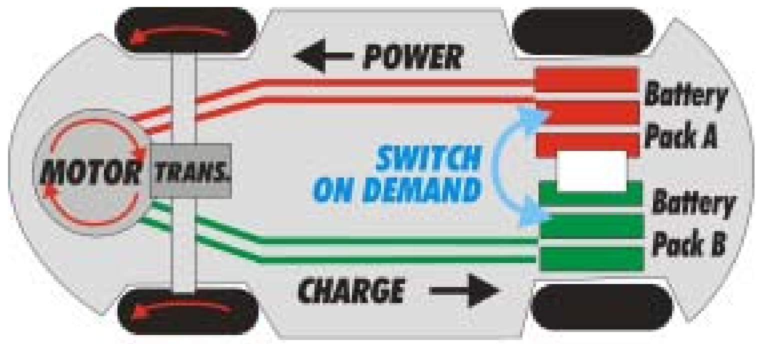
- It is the 1st electric motor to utilize more than one discreet field
- It is the 1st electric motor to synchronize and run on 4 fields
- It is the 1st synchronous motor to operate on single phase electrical power
- It is the 1st synchronous motor ever that totally runs on pure AC power
- It is the 1st motor to eliminate the side force that robs conventional electric motors of power and efficiency
- It is the 1st motor to provide charge back electricity with no attrition on shaft speed or torque and with no increase on input current



In a world environment which already mandates 'all electric' vehicles to be available by 2015 in the U.S. and Europe, Trinity Motors, Inc. has developed a working prototype of a new motor/generator that can drive an electric car's wheels with one bank of batteries ---and apply a charge to a second bank of batteries at the same time.
The New York based engineering and development company describes its new product as, "A stunning breakthrough in motor generator design--- poised to ultimately change the cars we drive."

Now for the first time, long range, all-electric vehicles can be designed and built.

These new 'all-electrics' will have up to 500 hp on demand and the power, torque and speed more commonly associated with 'muscle cars.'   With patent protected 'charge back technology,' these new 'all electrics will have commensurate range of a conventional auto with a tank full of gas. Future designs based on this technology will be configured for even longer range with this scalable technology. Powered and charged by the revolutionary PowerMax Motor/Generator new designs incorporating this technology will soon emerge from around the world.



This new technology has predictable room to expand as engineers and scientists globally get involved in the design to increase both 'torque under load' and 'charge back potential.' At its current levels, the PowerMax system returns up to 85% of energy required to run the motor---under full load---to run an electric car. This performance is expected to increase as professionals become immersed in this exciting new form of power delivery and charge back.

Within ten years this technology could lead the way for a complete changeover to electric vehicles---with all the power, range, and conveniences we associate with current gasoline fueled vehicles.

The development of the charge back technology came about as a result of prototype work on Trinity’s EnergyMax ½ HP AC motor intended for the heating, air conditioning and appliance markets. This motor uses 30% less current as compared to similar products being produced around the world by major manufacturers.

EnergyMax ™

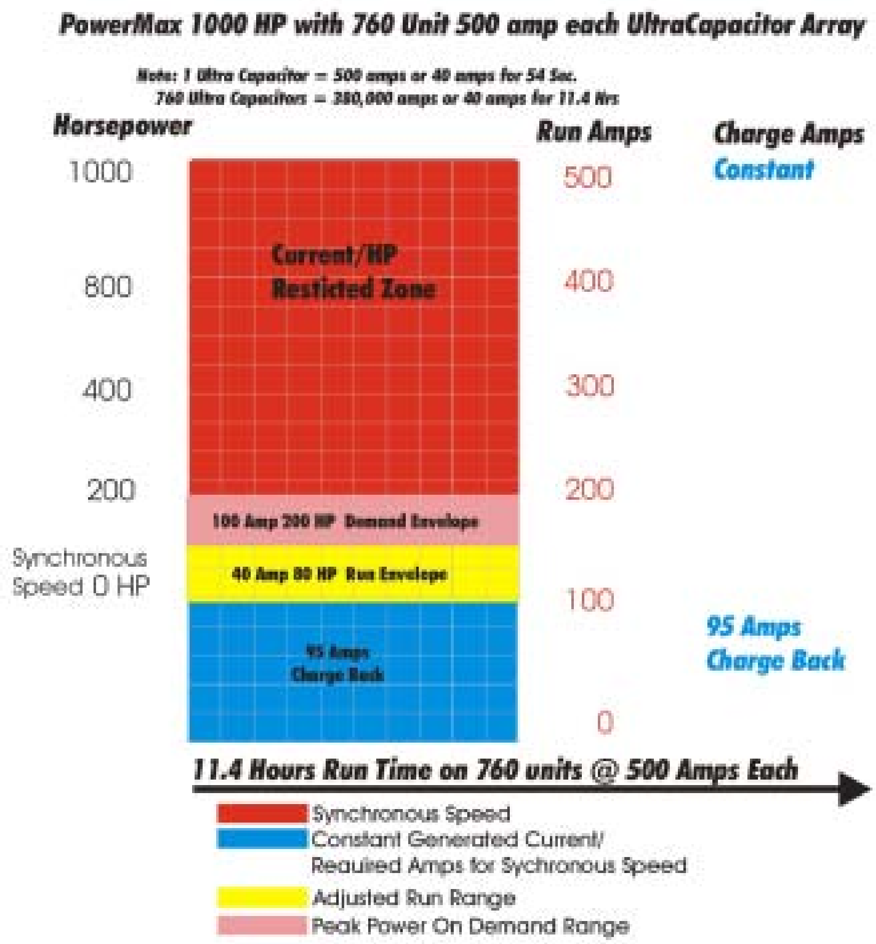
This performance can be attributed to a unique 'multiple field' configuration---not possible in current motors. These fields create more 'flux density' in operating systems within the motor.

Following several months in field calibration and testing, James recently began construction of a second prototype, which will serve as the manufacturing model for his 1/2 HP AC industry introduction.

Replacing the induction rotor with a passive magnetic assembly, typical to common 3 phase motors, to one of the multiple field AC stator configurations proved to be momentous. It was discovered that this configuration could run like a 3 phase synchronous motor for load, yet start and run continuously as a single phase AC motor.

Unlike typical single phase AC motors which 'switch-off' their start windings after startup to reduce heat, (become dormant) this new motor/generator could do the same, but then use the dormant start windings to react with the passive magnetic assembly incorporated in the rotor to generate electricity even while the motor was running full strength on the 'run windings' at synchronous speed.

In effect, the motor part produces the same HP of a regular synchronous motor while running on its run windings, and additionally generating 'free' power as output from its disconnected start windings.



Dubbed the PowerMax™ this motor generator can then be used to charge batteries, run accessories or even be fed back into the motor to increase efficiency, while producing work at the shaft.

Note: The PowerMax generates constant electricity, (separate from incoming line current), from the start. This 'free current' presently represents an additional 85% of the power used to run the motor portion at required HP and speed. But it does not tax the motor for this power. The electricity is produced from the 'kinetic power' produced as the rotor turns 'under normal AC synchronous operation' with embedded passive magnets.

With this 'free current,' a new charge back system for electric cars now can be built.

By having dual battery pack arrays, one pack can be used for all running gear and accessories while the other is being charged. This system can also be designed to switch over battery packs as one becomes depleted below set parameters.

The motor portion of this system will also offer additional flexibility to charge back. Because the motor is a synchronous motor, it produces maximum horsepower at normal run amperage. However, the motor can maintain synchronous operation on 20% of that amperage after start.

For example: In a 24 volt system: At 1000 HP the motor in Trinity's configuration will draw 600 amps. It will return 120 amps of power to charge back.

Trinity's motor requires 125 amps to stay running in synchronous operation 1800 RPM @ 0 HP. So the difference to keep it running is only 5 amps.

Since HP must be pulled off the motor to drive the car, an ***additional*** 80 amps of power must be put into the motor to develop 200 hp. 60 amps for averaging 70mph, and so on. The average amp usage would be approximately 45 amps per hour in urban driving.

Conversely, a typical electric car could be built with an existing 24 volt system 200 HP AC motor from another manufacturer. This hypothetical system would require at least 600 amps for 200 HP, at least 300 amps for 70 mph operation, and approximately 250 amps constant pull per hour for urban driving.

Compare this with an average pull of 45 amps per hour using Trinity's motor generator system with charge back, and it's easy to understand range increase.
This system will dramatically increase the current range of electric vehicles by greatly reducing the current draw on batteries.

Couple this with innovative battery systems, such as Ultra Capacitor batteries and dynamic braking (charging while braking), photovoltaic cells and the company's predicted role as 'the first choice' in electric vehicle segway technology starts to make sense. Hybrid and Fuel Cell vehicles will also benefit from this technology running further on the same amount of fuel.

Who Will Build These New Electric Cars Based On The PowerMax?
Like other owners of high tech intellectual property with a working prototype system on the bench, Inventor Gordon James is looking to licensing as the best vehicle to implement the new PowerMax motor generator. Companies under consideration (or currently under discussions with) for licensing include GM, Ford, Chrysler, Mazda, Honda, Toyota, British Leyland, BMW, Audi, and Peugeot as current OEM's.

Other OEM's which manufacture or sell battery, fuel cell, photovoltaic, or other alternative hybrid systems are also targeted for possible licensing.

Other Opportunities for this technology
a. Power Tools
b. Electric Boats
c. Aircraft
d. Military

For more information, or to set up a demonstration of this exciting new technology:

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