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 (56) Documents Cited:
WO 2012/054617 A1 **WO 2005/025038 A2**
CA 002689404 A1 **NL 001026508 C2**
US 20090251098 A1 **US 20080309290 A1**
US 20040026925 A1 **US 20040004459 A1**
 (58) Field of Search:
 INT CL **H02K**
 Other: **ONLINE: WPI, EPODOC**

(54) Title of the Invention: **Energy conversion concept redefined**
 Abstract Title: **A motor/generator arrangement**

(57) Batteries A, B selectively supply power to a motor which drives a car transmission shaft. The batteries are charged by a car roof solar power arrangement, an alternator/dynamo driven from the motor or an charging area at the car's side. A charge mode switch selects the charging source and a charging battery selector selects the battery to be charged or discharged. Fig 1 discloses an electrical power generating arrangement in which the only charging means is the alternator/dynamo, the alternator/dynamo being driven from a motor powered from the batteries it charges. It is alleged that this will provide sufficient power to allow the system to be self sustaining.

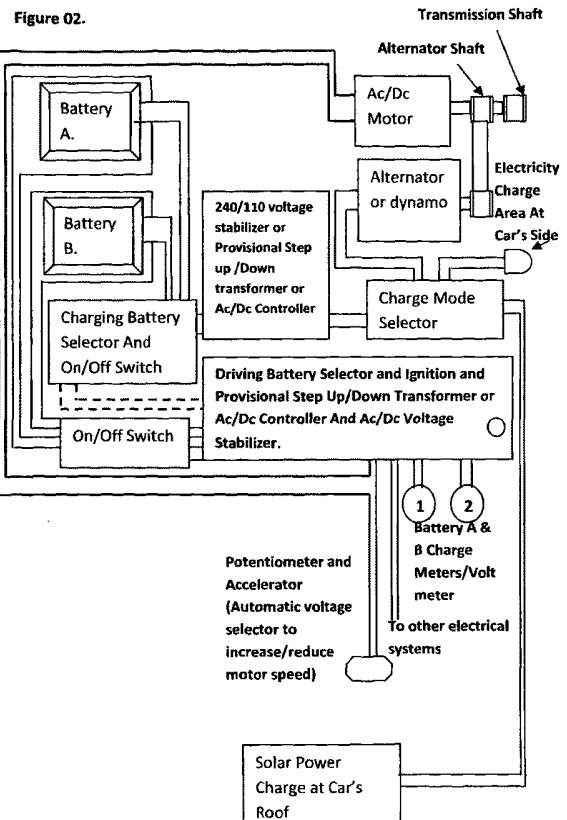


Figure 01.

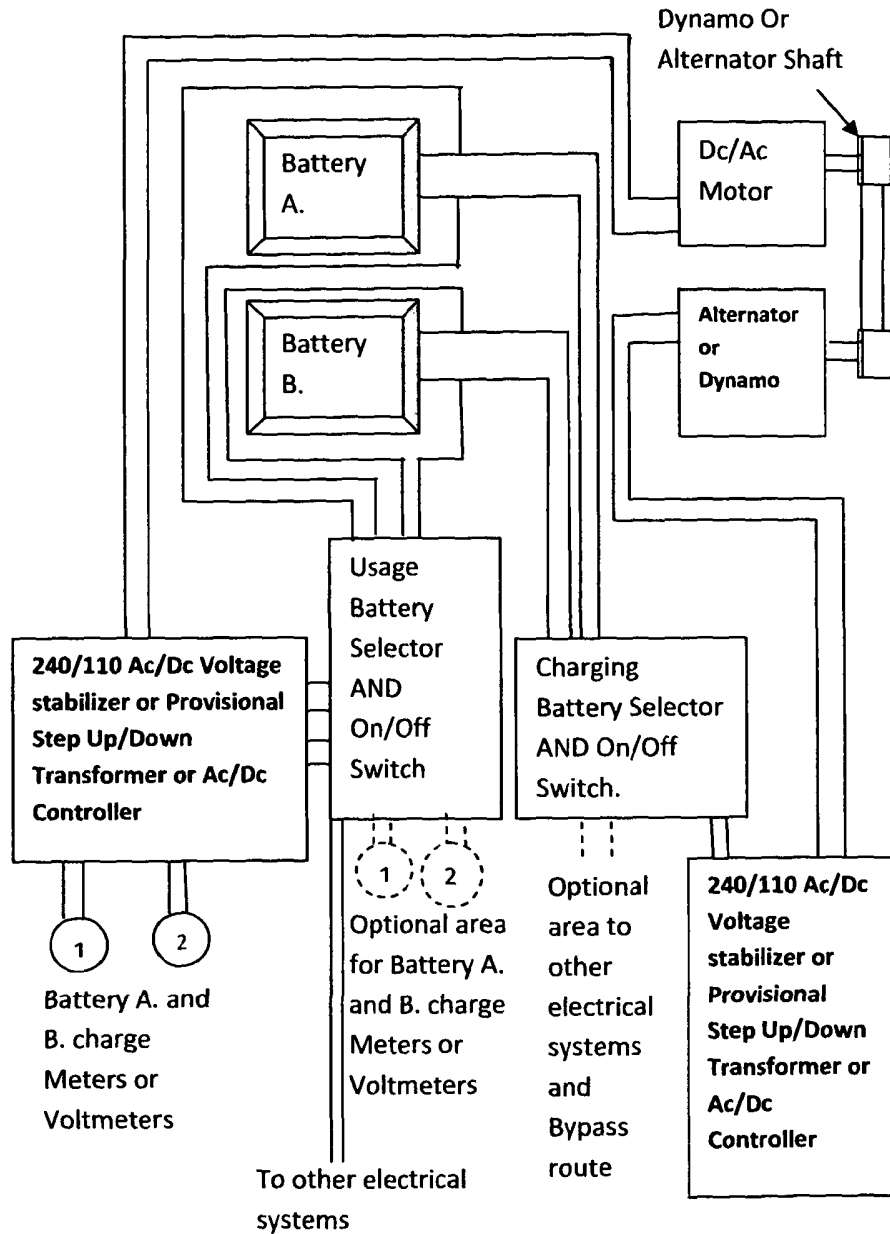
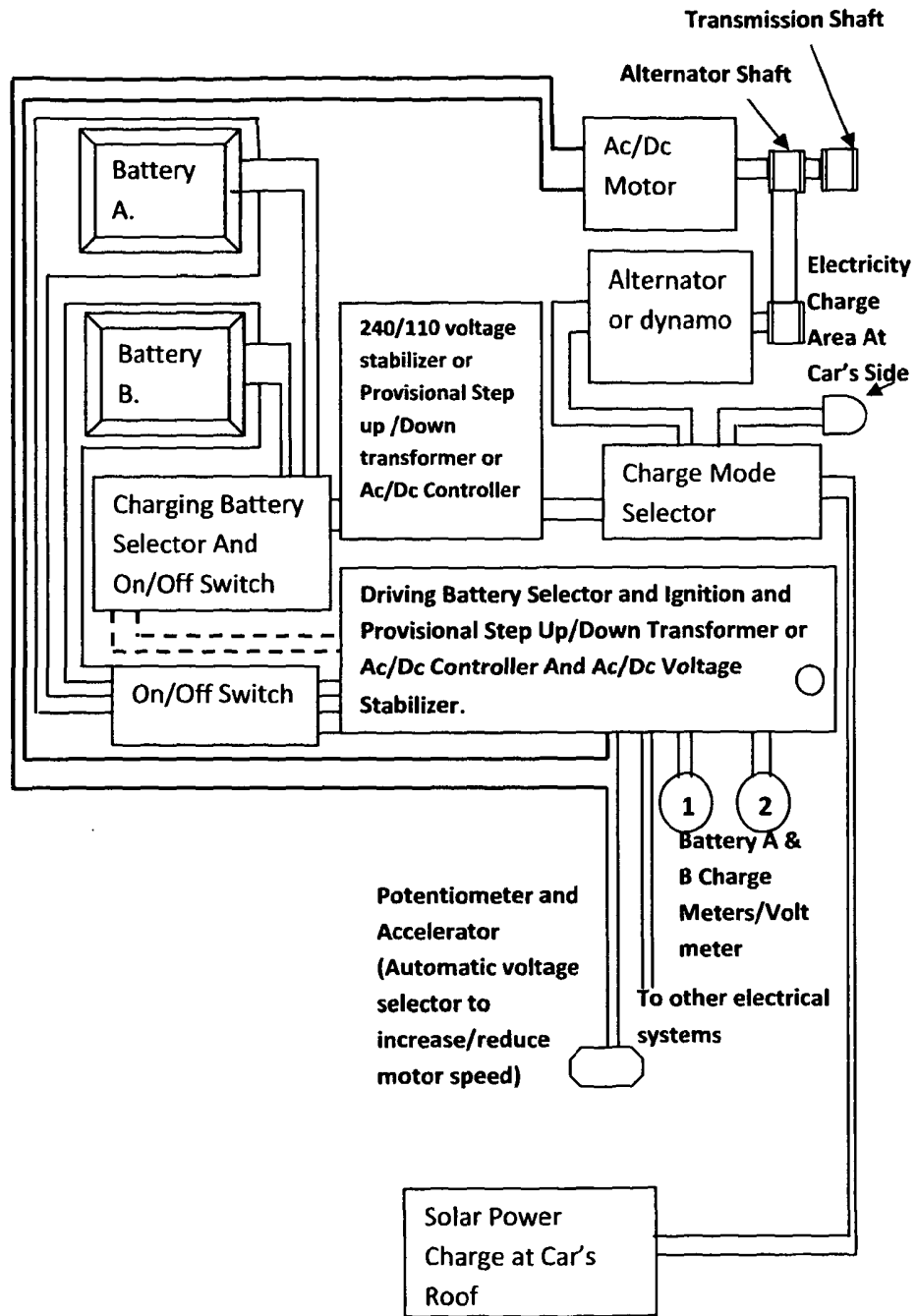


Figure 02.



DESCRIPTION

ENERGY CONVERSION CONCEPT REDEFINED

INVENTION BACKGROUND

The invention was necessitated by the rising need of a concept that will get rid off or reduce on the current over reliance on variable energy source(s) which has or have no back up. The invention should in turn, result to the existence of self sustaining electrical energy functioning or operating components or devices.

As a result, these aforesaid self sustaining components or devices should utilize existing electrical energy without having to:

- a) Result to the upgrading of existing electricity National Grid Systems.
- b) Use of fossil fuels or some of the currently known alternative energy sources such as bio fuels, solar power, wind power e.t.c

EXPLANATION OF PROBLEM BEING SOLVED

The concept aims at getting rid of the over reliance on variable energy source(s) which has or have no backup. For example, when using a fuel powered generator, one has to fill the generators fuel tank with fuel since the generator can not be started on an empty fuel tank. The generator then converts mechanical energy to electrical energy. The electricity is then utilized as is required until such time that the fuel in the fuel tank is depleted. As a result, power supply is immediately cut since there is no backup option that one can resort to so as to keep the generator up and running in the interim, but to have extra fuel added to the generators fuel tank. Therefore, the fuel being used is a variable energy source as it gets depleted over a period of time that it is being utilized by the generator to convert mechanical energy to electrical energy.

WHAT THE INVENTION DOES.

The concept aims at producing a constant energy source with a back up option thereby making components or devices that utilize electrical energy to be self sustaining.

INVENTION FEATURES AND A BRIEF INTRODUCTION TO DRAWINGS

The Ac/DC Motor is switched on using power from the battery or by manually turning the Motor/Dynamo or Alternator/Dynamo or Alternator shaft. The Ac/Dc motor drives the Dynamo or Alternator Shaft. The Alternator or Dynamo Shaft moves the Alternator or Dynamo thereby converting mechanical energy into electrical energy which is then supplied to the Optional 240/110 Ac/Dc Voltage Stabilizer And/or Provisional Step Up/Down Transformer And/or Ac/Dc Controller. The Ac/Dc Controller supplies either Alternating Current (Ac)/Direct Current (Dc) as is required by the user. Optional 240/110 Ac/Dc Voltage Stabilizer And/or Provisional Step Up/Down Transformer And/or Ac/Dc Controller because, if the electrical energy emanating from the Alternator or Dynamo is intermittently or irregularly being produced and supplied into a battery or batteries, that voltage will be regulated since only a very definite 240/110 Ac/Dc voltage must be supplied. The Voltage required may vary as is determined/required by the user /device.

Cables connect the Optional 240/110 Ac/Dc Voltage StabilizerAnd/or Provisional Step Up/Down Transformer And/or Ac/Dc Controller Panel to a Charging Battery Selector Control Panel And On/Off Switch. The On/Off Switch is used to connect or disconnect the electricity emanating from the alternator or dynamo hence disrupting/enabling the electricity to be supplied to the battery or batteries that needs recharging And/or other electrical systems And/or the bypass route as may be required.

The Charging Battery Selector Panel controls, directs and distributes current to other electrical systems, the battery or batteries that needs recharging and allows for a bypass route from where electricity can be allowed to repower or not to repower the Ac/Dc Motor should the need arise. If the battery/batteries do not need recharging, the Charging Battery Selector Control Panel has a switch which will not allow the aforesaid battery/batteries to be recharged. The Charging Battery Selector Control Panel Supplies current into a battery or batteries, which in turn convert chemical energy into electrical energy that is in turn supplied to a Usage Battery Selector And On/Off Switch Control Panel. The On/Off switch is used to connect or disconnect the electricity emanating from the battery/batteries hence disrupting/enabling the electricity to be supplied to the Optional 240/110 Ac/Dc Voltage Stabilizer or Provisional Step Up or Down Transformer Control Panel And/or Ac/Dc Controller And/or other electrical systems AND where possible, to instruments for measuring the amount of current produced, the power supplied and the pressure of the current.

Optional because if the power supplied by the battery or batteries is intermittent or irregular, that voltage will be regulated since only a very definite 240/110 Ac/Dc voltage must be supplied. The 240/110 Ac/Dc Voltage Stabilizer or Provisional Step Up/Down Transformer And/or Ac/Dc Controller controls, directs and distributes current to an Ac/Dc motor AND where possible, to instruments for measuring the amount of current produced, the power supplied and the pressure of the current. The process is then restarted.

NOTE: One can manually turn either the motor or dynamo to generate initial current to be supplied into the battery or batteries should the need arise. At the bypass route, electricity is passed through the 240/110 Ac/Dc Voltage Stabilizer or Provisional Step Up/Down Transformer And/or Ac/Dc Controller and then it repowers the Ac/Dc Motor. The process is then restarted.

A PARTICULAR EXAMPLE OF THE INVENTION

The best mode contemplated for carrying out the claimed invention can be in powering an electrical vehicle as described below.

The battery is charged by power emanating from the Energy Conversion Concept Redefined (which is to be explained), electricity charge, solar power charge etc. Current is supplied to a Charge Mode Selector which incorporates separate charging mode controls for the various different powers emanating source(s). The Charge Mode Selector connects or disconnects the electricity emanating from the Alternator/Dynamo Or From the various different power sources so that only one power source or no power sources is/are allowed to operate at any given time as may be required, hence disrupting/enabling the electricity to be supplied to the Optional 240/110 Ac/Dc Voltage Stabilizer or Provisional Step Up/Down Transformer And/or Ac/Dc Controller.

Cables connect the Charge Mode Selector to an Optional 240/110 Ac/Dc Voltage Stabilizer or Provisional Step Up/Down Transformer And/or Ac/Dc Controller. Optional 240/110 Ac/Dc Voltage Stabilizer or Provisional Step Up/Down Transformer And/or Ac/Dc Controller because, if the power generating source has irregular or intermittent power supply being produced or supplied, that voltage will be regulated since only a very definite 240/110 Ac/DC voltage must be supplied. The Voltage required may vary as is determined/required by the user. The Ac/Dc Controller supplies either Alternating Current (Ac)/ Direct Current (Dc) as is required by the user.

Cables connect the Optional 240/110 Ac/Dc Voltage Stabilizer And/or Ac/Dc Controller or Provisional Step Up/Down Transformer Control Panel to a Charging Battery Selector And On/Off Switch Control Panel.

The On/Off switch is used to connect or disconnect the electricity emanating from the Optional 240/110 Ac/Dc Voltage Stabilizer And/or Ac/Dc Controller or Provisional Step Up/Down Transformer Control Panel hence disrupting or enabling the electricity to be supplied to the battery or batteries that need recharging And/ Or to a bypass route that will allow current to be supplied to the Driving Battery Selector And Ignition And Provisional Step Up/Down Transformer or Ac/Dc Controller And /or Ac/Dc Voltage Stabilizer and et al until it repowers the motor; thereby restarting the process. While using the bypass process, the On/Off switch that connects or disconnects the electricity produced as a result of the chemical energy from the battery being converted to electrical energy may be used so as to avoid two power sources supplying power to the Driving Battery Selector And Ignition And Provisional Step Up/Down Transformer or Ac/Dc Controller And Ac/Dc Voltage Stabilizer and et al at the same time. The Charging Battery selector controls, directs and distributes current to the battery/batteries that need recharging. If the battery/batteries do not need recharging, the Charging Battery Selector has a switch that will not allow the aforesaid battery/batteries to be recharged.

From the batteries, there is an On/Off Switch which is used to connect or disconnect the electricity emanating from the battery/batteries as a result of the chemical energy from the battery/batteries being converted into electrical energy. The electricity is then supplied to the Driving Battery Selector And Ignition And Provisional Step Up/Down Transformer or Ac/Dc Controller And/ or 240/110 Ac/Dc voltage stabilizer which incorporates instruments for measuring the amount of current produced, the power supplied and the pressure of the current.

The Driving Battery Selector and Ignition and Provisional Step Up/Down Transformer or Ac/Dc Controller And/ or Ac/Dc Voltage Stabilizer Control Panel : controls, directs and distributes current to other electrical systems AND to a Potentiometer, Accelerator or Automatic Voltage Selector(to increase or reduce motor speed) and to an Ac/Dc motor. The accelerator pedal hooks to a pair of **potentiometers** (variable resistors), and these potentiometers provide the signal that tells the Ac/Dc Controller how much power it is supposed to deliver. The Ac/Dc Controller can deliver zero power (when the car is stopped), full power (when the driver floors the accelerator pedal), or any power level in between. The AC/DC controller when connected to the batteries and the AC/DC motor; If the driver floors the accelerator pedal, the controller delivers the full 96 volts(for example) from the batteries to the motor. If the driver takes his/her foot off the accelerator, the controller delivers zero volts to the motor. For any setting in between, the controller "chops" the 96 volts thousands of times per second to create an average voltage somewhere between 0 and 96 volts. The Motor then drives the transmission Shaft, which then moves the car wheels.

The Energy Conversion Concept Redefined is hereby explained as: The Ac/Dc Motor drives the Transmission Shaft AND the Alternator or Dynamo shaft. The Transmission Shaft moves the vehicles wheels as is required by the driver. The Alternator or Dynamo Shaft moves the Alternator or Dynamo resulting to mechanical energy being converted into electrical energy by the Alternator or Dynamo. The electricity is then supplied to the Charge Mode Selector and et al until it reaches the Driving Battery Selector and Ignition and Provisional Step Up/Down transformer or Ac/Dc Controller And/ or Ac/Dc voltage stabilizer Control Panel from whence it is used to drive the Ac/Dc motor and et al as already explained. The process is then restarted until such time that the current is no longer needed.

CLAIMS

The invention aims at having mechanical energy being converted into electrical energy which is then utilized as is required and recycled; that is , by repowering a machine or device supplying motive power(for example a motor) to any machine or device that converts mechanical energy into electrical energy (for example a dynamo or alternator).



Application No: GB1111304.0

Examiner: Mr John Cockitt

Claims searched: The claim

Date of search: 25 July 2012

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X,E	The claim	WO2012/054617 A1 NELSON - includes multiple batteries, charging controls
X	The claim	US2008/309290 A1 JOHNSON - includes start/stop switch
X	The claim	NL1026508 C2 VERSTAPPEN - includes hand starting
X	The claim	US2004/004459 A1 BAILEY - includes vehicle applications
X	The claim	US2004/026925 A1 KONG - includes solar power option
X,P	The claim	CA2689404 A1 LEBLANC - includes alternative use of solar power
X	The claim	US2009/251098 A1 GRANT - includes solar power
X	The claim	WO2005/025038 A2 BOON - includes prolonging operation by charging battery

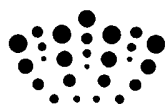
Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

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Worldwide search of patent documents classified in the following areas of the IPC

H02K

The following online and other databases have been used in the preparation of this search report

ONLINE: WPI, EPODOC

International Classification:

Subclass	Subgroup	Valid From
H02K	0053/00	01/01/2006
B60L	0011/18	01/01/2006