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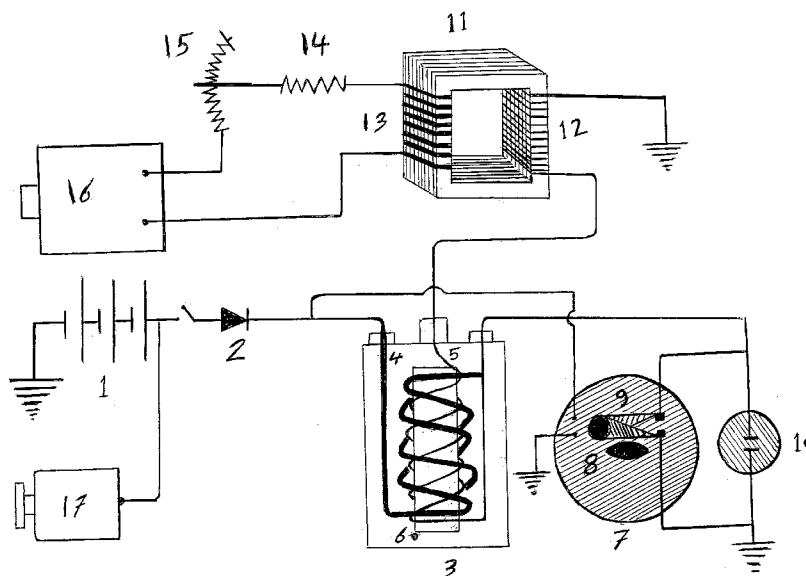
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(54) Title: THE ELECTRICITY-GENERATING CIRCUIT



(57) Abstract: An electricity generating circuit to supply an electric car motor (16) or other industrial devices is shown. An dynamo/generator (17) feeds a battery (1). The battery (1) supplies the primary coil (4) of a single-phase transformer (3) across a platinum contact (9) to the ground. The battery (1) also supplies a small motor (7) with a binary cam (8) which activates the platinum contact (9). The secondary coil (5) of the transformer (3) is nested in the primary coil (4) and also connected over the latinum contact (9) at the ground. When the platinum contact (9) is closed the induction current through the primary coil (4) generates a high voltage impulse in the secondary coil (3) which drives the load motor (16). A high voltage transforemer, called converter (11), and two resistance (14,15) are interposed due to transform the high voltage into the desired current for motor (16).

# **The Electricity-Generating Circuit [ ES ]**

## **Technical Field**

The circuit (ES) consists of two sections :

One section is connected with electrical physics and the field of magnetism.  
The other section is connected with cars.

It is a circuit that generates electricity for running a huge electric motor like the motor of a car.

## **Background Art**

- \* Using various acidic batteries.
- \* Using Lithium batteries.
- \* Using cell batteries.

## **Disclosure of the Invention**

The Electricity-Generating Circuit [ ES ] consists of 17 parts:

- 1- A battery
- 2- A Zener Diode
- 3- A bobbin for high voltage current
- 4- A primary coil
- 5- A secondary coil
- 6- An iron rod
- 7- A small electric motor
- 8- A binary cam
- 9- A platinum
- 10- A condenser
- 11- A converter body for lower voltage
- 12- A primary coil for the converter
- 13- A secondary coil for the converter
- 14- A constant resistance
- 15- An alternating resistance
- 16- An electric car-motor
- 17- A dynamo/generator

## **The function of each part**

### **1- The function of the battery**

- \* It supplies the electric circuit(ES)with the current needed to run it.
- \* It supplies the devices of the electric car with the current needed to run it

### **2- The function of Zener Diode**

It is made of silicon and is fixed at the beginning of the circuit after the on/off switch. It stabilizes the current of the battery that passes through it and goes to the circuit.

### **3- The function of high voltage bobbin**

It generates a high voltage current with lower ampere that goes to the lower voltage converter (11). The bobbin (3) takes its current from the battery (1) passing through Zener Diode (2).

#### **Constitution of high voltage bobbin and how it works**

The bobbin (3) consists of a primary coil (4) , a secondary coil (5) and an iron rod (6).

### **4- The function of the primary coil**

It has a fewer turns and a big thickness of portion. It creates a magnetic field round the iron rod (6) which takes its current from the battery (1) and is connected to the dead terminal through the platinum (9).

### **5- The function of the secondary coil**

It has many turns and a small thickness of portion. It generates a high voltage current from the magnetic field around the iron rod (6).

### **6- The function of the iron rod**

It consists of many iron strips which are coiled with the primary coil (5) and then coiled with the primary coil (4).

### **How the high voltage bobbin works**

The bobbin consists of an iron rod (6) which is coiled with the secondary coil (5) that has many turns and a small thickness of portion, and then coiled with the primary coil (4) that has a fewer turns and a big thickness of portion. The primary coil (4) is connected to the battery (1) through the Zener Diode (2) and its other terminal is connected to the dead terminal through the two contact points of the platinum (9). The primary coil (4) creates a magnetic field around the iron rod (6) and the secondary coil (5). When the two contact points of the platinum (9) are connected, the magnetic field around the iron rod (6) is lost, and as a result, a high voltage current with lower ampere is generated in the secondary coil (5) and comes out of the bobbin (3) through the terminal of the secondary coil whose other terminal is connected to the dead terminal and the primary coil (4) inside the bobbin (3).

#### **7- The function of the small electric motor**

It is a small electric motor that takes its current from the battery (1). The binary cam (8) is fixed with the platinum (9) on the motor shaft. When the cam (8) presses the platinum (9), it switches the current on and off between the two terminals of the platinum (9). Then the cam (8) rotates with the motor shaft.

#### **A Note :**

The cam prongs can be two, three or four prongs according to the number of rotations in the motor per minute to adjust the vibration of the current which is generated in the bobbin (3). It should be 50 Hertz per second.

#### **8- The function of the binary cam**

It is fixed on the motion shaft of the small electric motor (7) to press on the platinum (9) so as to switch on and off the current between the two terminals of the platinum (9).

#### **9- The function of the platinum**

It switches on and off the current between its two terminals.

**10- The function of the condenser**

- \* It prevents the occurrence of electrical sparks between the two terminals of the platinum (9).
- \* It discharges the extra electric charge in the primary coil (4) when we switch off the two terminals of the platinum (9).

**11- The function of the body of the converter for lower voltage**

It is an iron body that is square in shape and it consists of many iron strips coiled with a primary coil(12)and a secondary coil(13).

The converter reduces the high voltage with lower ampere which comes from the secondary coil (5) in the bobbin (3) to a lower voltage so as to increase the ampere to the required point.

**12- The function of the primary coil**

It is an isolated coil made of copper with many turns and a small thickness of portion. It takes its current from the secondary coil (5)in the bobbin(3)and its other terminal is connected to the dead terminal. The primary coil (12) creates a magnetic field around the body of the converter (11) and the secondary coil (13)

**13- The function of the secondary coil**

It is an isolated coil made of copper with fewer turns and a big thickness of portion. It is fixed on the body of the converter(11). It generates an electric current from the magnetic field around the iron body (11). The secondary coil (13) is connected to the constant resistance (14) to provide it with current. Its other end is connected the negative terminal of the car motor (16).

**How the converter for lower voltage (11) works**

The converter reduces the electric current and increases the ampere of the current with high voltage and lower ampere that comes from the bobbin (3). The primary coil (12) takes high voltage current from the secondary coil(5)in the bobbin(3)and creates a magnetic field around the iron rod (11). The other terminal is connected to the dead terminal. The secondary coil (13) changes the magnetic field around the iron rod (11) into a lower voltage current with high ampere. This current goes to the constant resistance (14) through the terminal of the secondary coil (13) in the converter(11). The other terminal of the secondary coil(13) is connected to the negative terminal of the car motor(16).

**14- The function of the constant resistance**

It is a resistance with constant ohm which modifies the current that goes to the alternating resistance (15) to make the current which comes from the converter (11), constant in voltage and ampere.

**15- The function of the alternating resistance**

It is a resistance which is connected successively. The arm of connecting current moves on it to allow current to pass from the constant resistance (14) to the alternating resistance (15). When the arm moves out, it allows a big part of the resistance to be connected to the circuit. This causes a small current to pass to the car motor (16) which runs slowly according to the amount of current.

But, when the arm moves in, it allows a small part of the resistance to be connected to the circuit. This causes a big current to pass to the car motor (16) which runs at high speed according to the high voltage current which it receives.

The alternating resistance is fixed when the car motor (16) runs at stages of speed to control the amount of current which goes to it. In this case, the motion of the car motor goes to the wheels directly.

But, if the car motor runs at high speed, the alternating resistance is removed. In this case, the motion of the car motor goes to the wheels through the gear box and the other devices of moving motion.

**16- The function of the car motor**

It is the main motor which moves the car. It takes its current from the alternating resistance (15). It is fixed on the body of the car to transfer its motion to the back devices of motion in the car which eventually moves the car.

**17- The function of the Dynamo(Generator)**

The dynamo compensates the loss of charge in the battery (1). It is fixed on the body of the car motor (16) and connected to the motion shaft to transform the motion energy to an electric energy in order to compensate the loss of charge in the battery (1).

## **How the Electricity-Generating Circuit | ES | works**

The electric current comes from the battery (1) to Zener Diode (2) which stabilizes the current of the battery(1). The current, then, passes in the primary coil(4) in the bobbin(3) to the dead terminal through the two terminals of the platinum(9). The primary coil(4) creates a magnetic field around the iron rod(6) and the secondary coil(5).

When the two terminals of the platinum(9) are switched on, the magnetic field around the iron rod(6) is lost. The condenser(10) discharges the stored charge into the primary coil (4) and as a result, a high voltage current with lower ampere is generated in the secondary coil(5). This current goes through the terminal of the secondary coil(5) in the bobbin(3) to the primary coil(12) in the lower voltage converter(11). The primary coil(12) creates a magnetic field around the iron rod (11), and as a result, a lower voltage current with high ampere is generated in the secondary coil(13). The converter(11) reduces the high voltage with lower ampere, which comes from the bobbin(3), to a suitable lower voltage current and increases the ampere to a suitable point according to the requirements of work. This current passes from the secondary coil(13) in the converter (11) to the constant resistance (14) which modifies the amount of current according to the requirements of work. This current, then, goes to the alternating resistance(15) which controls the amount of electric current that goes to the car motor according to the requirements of work. For example, when part of the resistance(15) comes out of the circuit, the amount of current, which goes to the car motor(16), increases, and as a result, this increases the speed of the car motor.

But when part of the resistance(15) gets into the circuit, the amount of current which goes to the car motor(16) decreases and so it reduces the speed of the car motor. In this way, we can control the speed of the car.

The dynamo(17) compensates the loss of charge in the battery(1). The dynamo is fixed on the body of car motor and it is connected to the motion shaft with a strap. The dynamo(17) transforms the motion energy into electric energy which compensates the loss of charge in the battery (1).

## **Brief Description of Drawings**

### **1- The function of the battery**

- \* It supplies the electric circuit(ES)with the current needed to run it.
- \* It supplies the devices of the electric car with the current needed to run it.

### **2- The function of Zener Diode**

It is made of silicon and is fixed at the beginning of the circuit after the on/off switch. It stabilizes the current of the battery that passes through it and goes to the circuit.

### **3- The function of high voltage bobbin**

It generates a high voltage current with lower ampere that goes to the lower voltage converter (11). The bobbin (3) takes its current from the battery (1) passing through Zener Diode (2).

#### **Constitution of high voltage bobbin and how it works**

The bobbin (3) consists of a primary coil (4) , a secondary coil (5) and an iron rod (6).

### **4- The function of the primary coil**

It has a fewer turns and a big thickness of portion. It creates a magnetic field round the iron rod (6) which takes its current from the battery (1) and is connected to the dead terminal through the platinum (9).

### **5- The function of the secondary coil**

It has many turns and a small thickness of portion. It generates a high voltage current from the magnetic field around the iron rod (6).

### **6- The function of the iron rod**

It consists of many iron strips which are coiled with the primary coil (5) and then coiled with the primary coil (4).

### **7- The function of the small electric motor**

It is a small electric motor that takes its current from the battery (1). The binary cam (8) is fixed with the platinum (9) on the motor shaft. When the cam (8) presses the platinum (9), it switches the current on and off between the two terminals of the platinum (9). Then the cam (8) rotates with the motor shaft.

#### **A Note :**

The cam prongs can be two, three or four prongs according to the number of rotations in the motor per minute to adjust the vibration of the current which is generated in the bobbin (3). It should be 50 Hertz per second.



**8- The function of the binary cam**

It is fixed on the motion shaft of the small electric motor (7) to press on the platinum (9) so as to switch on and off the current between the two terminals of the platinum (9).

**9- The function of the platinum**

It switches on and off the current between its two terminals.

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\* It prevents the occurrence of electrical sparks between the two terminals of the platinum (9).

\* It discharges the extra electric charge in the primary coil (4) when we switch off the two terminals of the platinum (9).

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It is an iron body that is square in shape and it consists of many iron strips coiled with a primary coil(12)and a secondary coil(13).

The converter reduces the high voltage with lower ampere which comes from the secondary coil (5) in the bobbin (3) to a lower voltage so as to increase the ampere to the required point.

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It is an isolated coil made of copper with fewer turns and a big thickness of portion. It is fixed on the body of the converter(11). It generates an electric current from the magnetic field around the iron body (11). The secondary coil (13) is connected to the constant resistance (14) to provide it with current. Its other end is connected the negative terminal of the car motor (16).

**14- The function of the constant resistance**

It is a resistance with constant ohm which modifies the current that goes to the alternating resistance (15) to make the current which comes from the converter (11), constant in voltage and ampere.

**15- The function of the alternating resistance**

It is a resistance which is connected successively. The arm of connecting

current moves on it to allow current to pass from the constant resistance (14) to the alternating resistance (15). When the arm moves out, it allows a big part of the resistance to be connected to the circuit. This causes a small current to pass to the car motor (16) which runs slowly according to the amount of current.

But, when the arm moves in, it allows a small part of the resistance to be connected to the circuit. This causes a big current to pass to the car motor (16) which runs at high speed according to the high voltage current which it receives.

The alternating resistance is fixed when the car motor (16) runs at stages of speed to control the amount of current which goes to it. In this case, the motion of the car motor goes to the wheels directly.

But, if the car motor runs at high speed, the alternating resistance is removed. In this case, the motion of the car motor goes to the wheels through the gear box and the other devices of moving motion.

#### **16- The function of the car motor**

It is the main motor which moves the car. It takes its current from the alternating resistance (15). It is fixed on the body of the car to transfer its motion to the back devices of motion in the car which eventually moves the car.

#### **17- The function of the Dynamo(Generator)**

The dynamo compensates the loss of charge in the battery (1). It is fixed on the body of the car motor (16) and connected to the motion shaft to transform the motion energy to an electric energy in order to compensate the loss of charge in the battery (1).

## **Best Mode for Carrying out the Invention**

By signing a contract with a company for car manufacturing to carry out the invention and develop cars by fixing a car motor which runs on **Electricity-Generating Circuit[ES]**

### **Industrial Applicability**

- 1- The Electricity-Generating Circuit[ES] can be applied in the field of cars which run on electric energy.
- 2-It can be applied in the field of making generators which run when the electric current is cut out in government institutions.

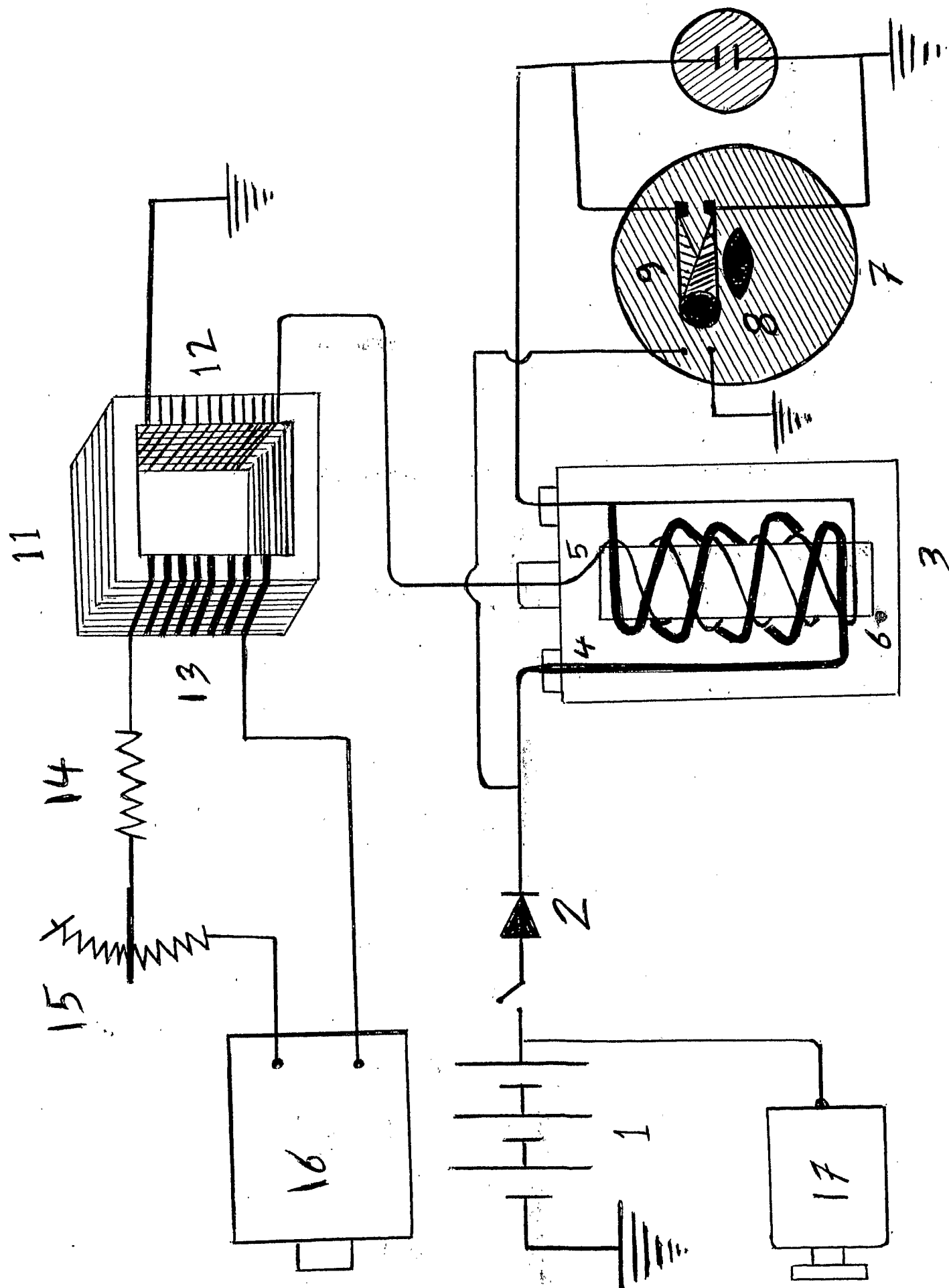
## **Claims**

1)\_claims of the electricity – generating circuit ES and how to work in a whole system for all parts

- it is an electricity circuit which generate electricity to run a big electricity motor which can be installed in a car and work as a basic motor for it.

2) claim all parts of electricity circuit ES - it works in a whole system which consists of

- 1- A battery
- 2- A Zener Diode
- 3- A bobbin for high voltage current
- 4- A primary coil
- 5- A secondary coil
- 6- An iron rod
- 7- A small electric motor
- 8- A binary cam
- 9- A platinum
- 10- A condenser
- 11- A converter body for lower voltage
- 12- A primary coil for the converter
- 13- A secondary coil for the converter
- 14- A constant resistance
- 15- An alternating resistance
- 16- An electric car – motor
- 17- A dynamo / generator



## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EG 2006/000008

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>8</sup>: **H02M 7/58** (2006.01); **H01F 30/10** (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>8</sup>: H02M, H01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPODOC, PAJ, WPI ; TXTUS0, TXTUS1, TXTUS2, TXTUS3, TXTEP1, TXTGB1, TXTWO1, TXTAU1

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 37 36 921 A1 (JOMI) 11 May 1989 (11.05.1989) <i>column 1, line 37-50, column 2, line 41-48, column 3, line 31-41, column 4, line 16-19, figure 1.1.</i>	1
A	<i>column 1, line 37-50, column 2, line 41-48, column 3, line 31-41, column 4, line 16-19, figure 1.1.</i>	2
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X	US 5,412,268 A (ARNAUD) 2 May 1995 (02.05.1995) <i>claims 1, 2 and 5.</i>	1
A	<i>claims 1, 2 and 5.</i>	2
	--	
A	GB 699 144 A (FRÜNGEL) 28 October 1953 (28.10.1953) <i>page 2, line 106-109, page 3, line 39-48, page 4, line 75-108, figure 3</i>	2
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☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search  
30 June 2006 (30.06.2006)Date of mailing of the international search report  
14 July 2006 (14.07.2006)Name and mailing address of the ISA/ AT  
**Austrian Patent Office**  
Dresdner Straße 87, A-1200 ViennaAuthorized officer  
**HAWEL R.**

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/EG 2006/000008

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
DE	A1	3736921	1989-05-11	none			
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