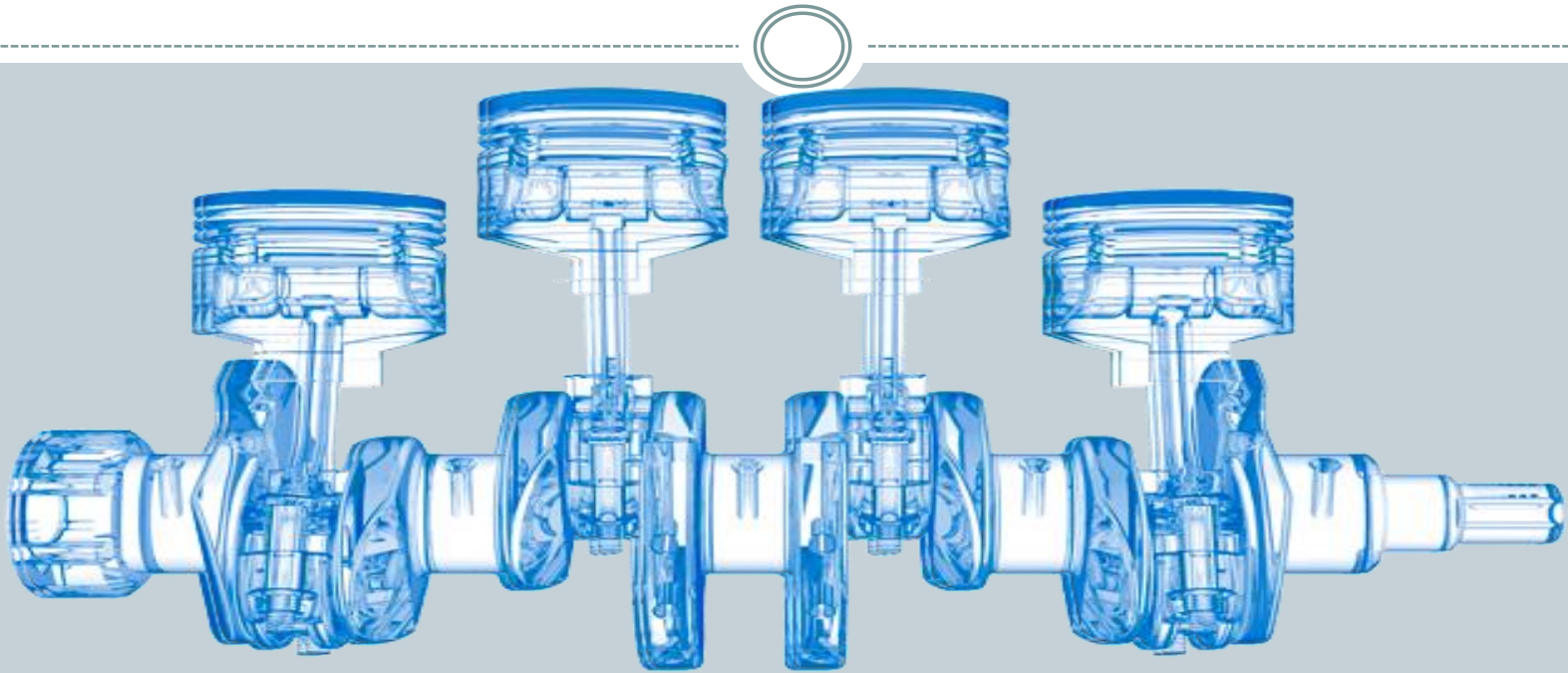


ELECTROMAGNETIC PISTON ENGINE



WHY ???



- The Conventional Fuels are Depleting day by day.
- For Future Generations “ There is No Fuel ” if Present Situation is Continued.
- To Overcome those Problems in Future, We think Why Can't Replace Chemical Fuel Source (Petrol & Diesel) with Electromagnetic Source.



DEMANDS IN ENERGY INCREASING

- The supply of energy is far less than its demands can effect the whole mankind to run towards the development or daily purposes that crisis is called energy crisis.



LACK OF ENERGY

INTRODUCTION



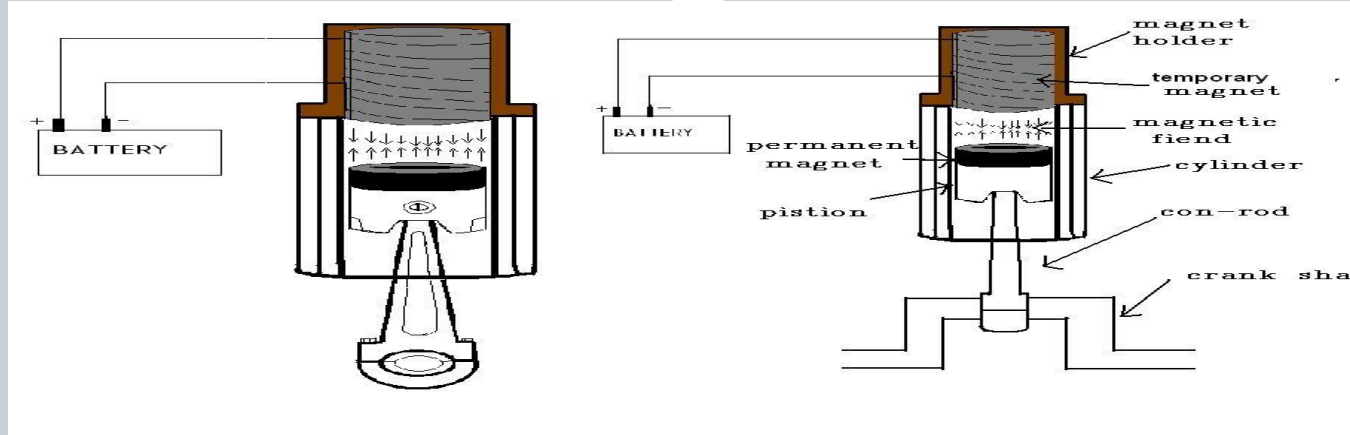
- The present invention relates to an electromagnetic piston engine capable of producing driving power by a reciprocating movement of a piston in a cylinder by electromagnetic force.
- In general, it can complement or replace existing engines that use fossil fuel, bio-fuel, electric power, solar power, wind power etc. Further, it can also be used to drive the power generators to produce the electricity.

PRINCIPLE



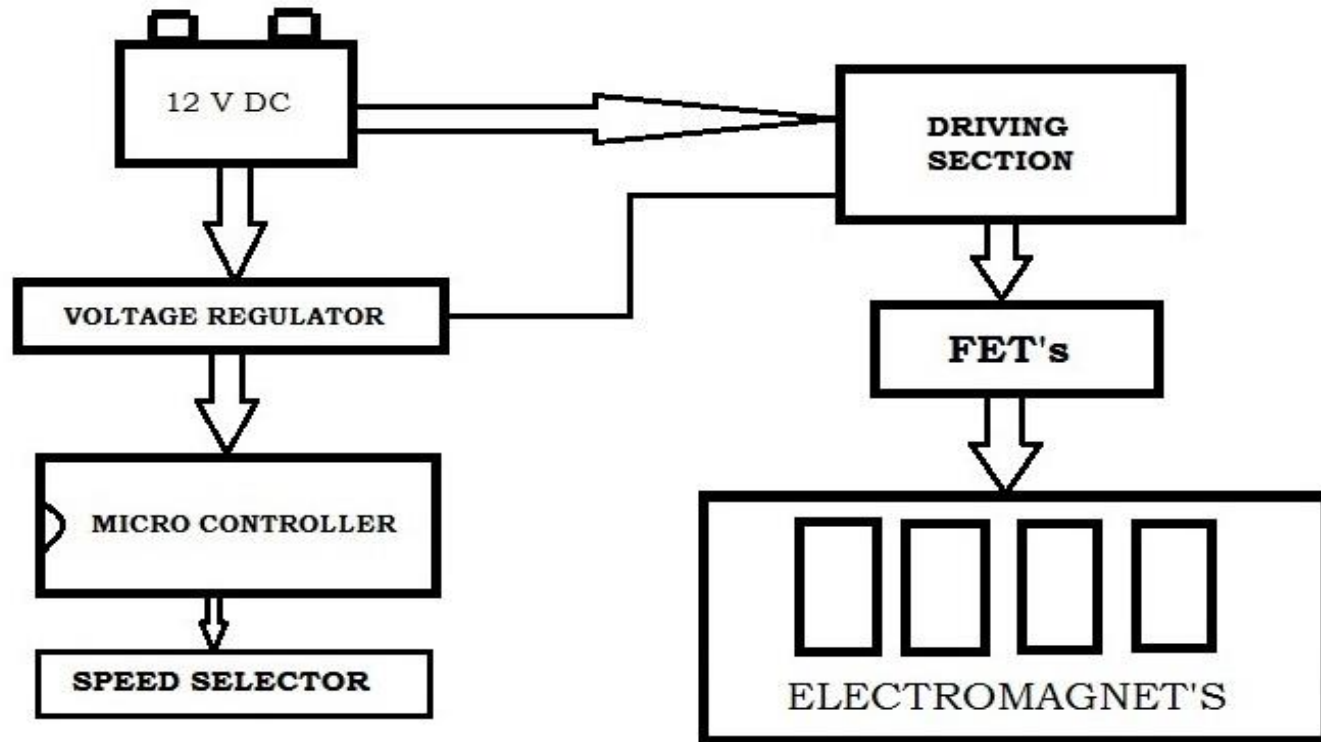
An electromagnetic piston engine comprising a cylinder made of steel, a piston made of a ferromagnetic stainless steel and adapted to reciprocate within the cylinder. Here the piston magnetization unit including an exciting coil for magnetizing a portion of the piston engagable with the cylinder so as to produce the entire power required for the movement of the piston.

PARTS



- Like conventional engines this system also has cylinder, piston (without piston rings), connecting rod, crank shaft.
- There is no inlet & exhaust valve or ports & no spark-plug too.

BLOCK DIAGRAM



WORKING DESCRIPTION



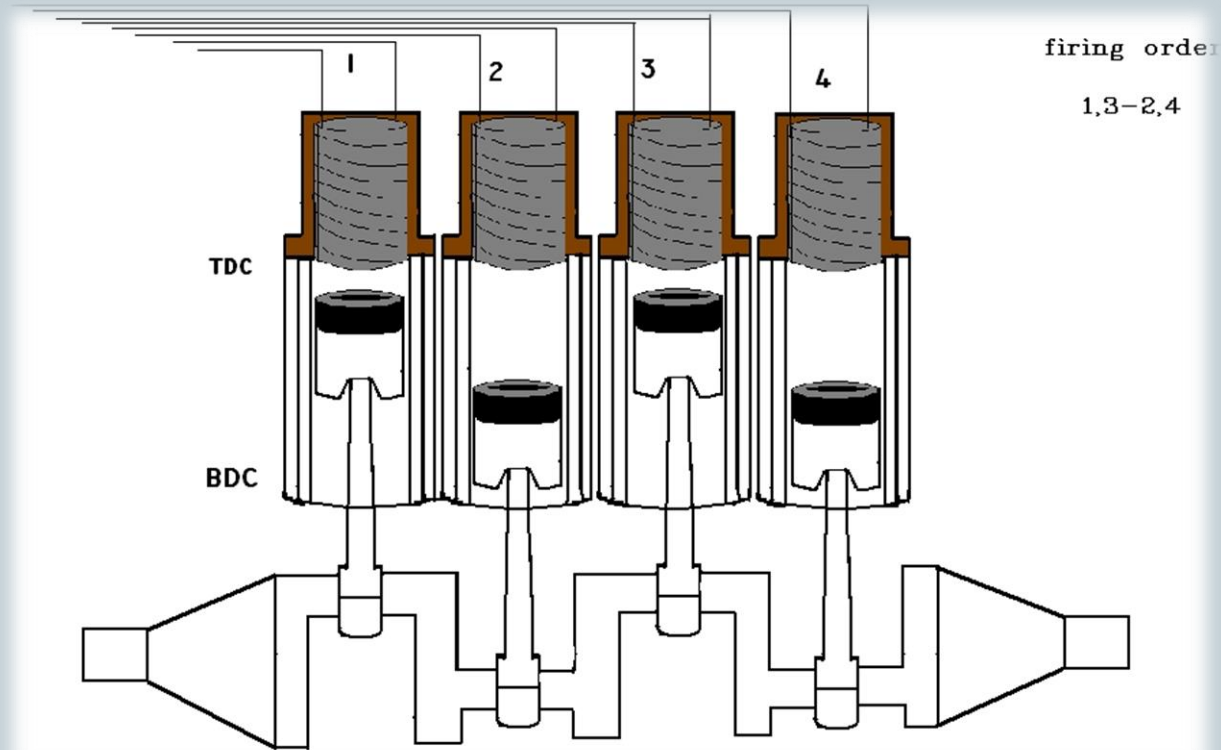
- In this, 12 Volts DC Battery is used as the Power Source, a Voltage Regulator (12 V) is Convert this 12 Volts into 5 Volts for the usage of Microcontroller.
- Microcontrollers are often Low-Power Devices. Microcontroller has a dedicated input device and often (but not always) has a small LED or LCD display for output. A Microcontroller also takes input from the device it is controlling and controls the device by sending Signals to different components in the device.

WORKING DESCRIPTION



- After Completion of Programs in the Microcontroller, it sends signals to the Driving Section. It already connected with the FET's (Field Effect Transistor).
- In This System FET's are used to permit the entire motion of the system or movement for the Piston-Cylinder Arrangement w.r.t Time Intervals.
- We may notice that Speed Selector is assembled with Microcontroller to change the speed of Engine. It possess Pins or Gear Arrangements for changing the Speed.

CRANK SHAFT & PISTON SETUP



EXPECTED RESULT & COST



❖ RESULT:

Electromagnetic Piston Engine Design Mechanism
Which runs without Fuel.

❖ COST:

- Cylinder (Steel) & Circuit's (MC Based)
- Piston (Ferro Magnetic Material)
- Setup & Arrangement (Wood)

Total : Rs.12,000/- (Approximately)

FUTURE SCOPE



- The Fossil Fuel sources like Petrol & Diesel are decreasing/depleting day by day.
- So, we need an Alternative Energy Source for Automobiles. That's why we've chosen Electromagnetic Source as alternative energy source in this Project.
- Electromagnetic Source doesn't depend on Climate Conditions & Seasonal Changes.
- Total Automobiles Industries Will use this Mechanism to produce Power (Or) Rotation.

CONCLUSION



- Therefore, the electromagnetic piston engine according to the present invention is higher in efficiency of energy consumption as compared with gasoline engines, so that it is extremely advantageous over gasoline engines in terms of saving energy.
- Furthermore, as the electromagnetic piston engine uses electricity that is clean energy, it is extremely useful in terms of preservation of the environment of the earth.

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THANK YOU

Any Queries ? ?