Conversion of IC Engine to Magnetic Engine with Minor Modification

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Abstract (not more than 300 words)

Internal combustion engines are one of the major causes of pollution. These engines work by burning fuels, hence contaminating environment through exhaust. Due to the mentioned reason there is a need of an alternate technology which is reusable and environment friendly. As an effort to control the effects of engine emissions, this research suggests an alternative technique known as Magnetic Repulsion Piston Engine (MRPE). MRPE is environment friendly and non-polluting engine that works on the principle of repulsion between same poles of magnet. The aim of this research is to manufacture such an engine that can use the repulsion between the same poles of magnet to produce power and rotate the crankshaft without changing the design of the IC engines. MRPE, uses a permanent and an electromagnet to achieve repulsion. Permanent magnet is attached upon the piston whereas the electromagnet replaces the cam valve mechanism. This arrangement with proper current timing of electromagnet drives the crankshaft. The modifications are made to one-cylinder IC engine for this particular study. Successful running of the engine using the magnet attraction and repulsion is achieved. The engine produced only 189 rpm under no load.
Keywords—*MRPE, IC Engine, Electromagnet, Neodymium Magnet*

Professional Biography (100-150 words)

I have recently completed my Bachelors from NFC Institute of Engineering and Technology Multan Pakistan. I am now doing a job in Chenab Engineering Works and Foundries Pakistan where I work as a Trainee Engineer. My role is to design jigs and fixtures and supervise the development process. I am also a part of R and D department. I am currently applying for Mater Program in Aerospace Engineering in different countries and trying to avail scholarships. I recently publish a research paper in International Journal of Scientific and Engineering Research. I also planning to publish another paper.



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