

Smart Energy

Dr. Katherasan Duraisamy¹, Manikandan. M², Maniraj. M³, Prem. A. S.⁴, Rajayogu. R.⁵

Head of Department, Department of Robotics and Automation¹

Students, Department of Robotics and Automation^{2,3,4,5}

Dhanalakshmi Srinivasan Engineering College (Autonomous), Permabalur, Chennai, India

Abstract: *The aim of the project is to design a smart energy which can save a lot energy Using the electro magnetic principles by the low electrical energy into mechanical and after that to electrical with 2 times then the input power. In this we are using an extra gear from the engine or motor shaft that will transmit the power to the generator. In motor vehicles, the transmission generally is connected to the engine crankshaft via a flywheel or clutch or fluid coupling, partly because internal combustion engines cannot run below a particular speed. The output of the transmission is transmitted via the driveshaft to one or more differentials, which drive the wheels. While a differential may also provide gear reduction, its primary purpose is to permit the wheels at either end of an axle to rotate at different speeds (essential to avoid wheel slippage on turns) as it changes the direction of rotation. Conventional gear/belt transmissions are not the only mechanism for speed/torque adaptation. Alternative mechanisms include torque converters and power transformation (e.g. diesel-electric transmission and hydraulic drive system). Hybrid configurations also exist. Automatic transmissions use a valve body to shift gears using fluid pressures in response to engine RPM, speed, and throttle input. The main methods of attaching gears to shafts are adhesives, press-fitting, cross drilled holes, compression, set screws, keyways, involute splines and taper lock bushings. Most industrial applications will use keyways and / or set screws. While adhesives and press fitting are usually done on low torque or hobby applications. Adhesives are mostly used in hobby applications with plastic gearing. Not only because plastic gears cannot handle much torque, but also because the shaft sizes remain small in diameter. In this battery will be connect to the ac motor the battery will be 12v and the motor rotate after the shaft of the motor is connect to the gears and that process is like a normal gear box function in that one gear is attached to the driven shaft of generator. It will produce the electric energy and it will connect to the any other electric supply or home application and one of the output will be connect to the same ac motor to avoid the battery and it can be cut power supply of battery after few minutes then the motor and generator will be work like a loop.*

Keywords: Smart Energy

REFERENCES

- [1]. Ari Ben-Menahem (2009). Historical Encyclopedia of Natural and Mathematical Sciences. Springer Science & Business Media. p. 2640. ISBN 978-3-540-68831-0. Archived from the original on 2016-12- 03.
- [2]. Matthew M. Radmanesh Ph.D. (2005). The Gateway to Understanding: Electrons to Waves and Beyond. AuthorHouse. p. 296. ISBN 978-1-4184- 8740-9.
- [3]. Jill Jonnes (2003). Empires of Light: Edison, Tesla, Westinghouse, and the Race to Electrify the World. Random House Publishing Group. p. 162. ISBN 978-1-58836-000-7.
- [4]. Augustus Heller (April 2, 1896). "AnianusJedlik". Nature. Norman Lockyer. 53 (1379): 516. Bibcode:1896Natur..53..516H. doi:10.1038/053516a0.
- [5]. Augustus Heller (2 April 1896), "AnianusJedlik", Nature, Norman Lockyer, 53 (1379): 516, Bibcode:1896Natur..53..516H, doi:10.1038/053516a0
- [6]. Birmingham Museums trust catalogue, accession number: 1889S00044
- [7]. Thomas, John Meurig (1991). Michael Faraday and the Royal Institution: The Genius of Man and Place. Bristol: Hilger. P. 51. ISBN 978- 0750301459.