

Control Strategy of Regeneration Braking system for Electric Vehicles

Dhiraj G. Borade¹, Bhushan A. Burkule², Harshad K. Avhad³,
Kiran P. Suryawanshi⁴, Suryabhan A. Patil⁵

Department of Mechanical Engineering

K. K. Wagh College of Engineering, Nashik, Maharashtra, India¹

Guru Gobind Singh Polytechnic, Nashik, Maharashtra, India^{2,4,5}

Vishwakarma Institute of Technology, Pune, Maharashtra, India³

dhirajborade2001@gmail.com¹, bhushan.burkule@ggsf.edu.in², dhirajborade2001@gmail.com³

kiran.suryawanshi@ggsf.edu.in⁴, suryabhan.patil@ggsf.edu.in⁵

Abstract: Nowadays energy crisis is the most important issue faced by many countries. To tackle it efficient machine design and electric vehicles are best fit practical solutions. In advanced countries regenerative braking system is the area where most of the work is going on. In this project we are using this regenerative braking concept to apply brakes to vehicle and creating electrical energy simultaneously by using alternator. Regenerative braking is an energy regaining mechanism that slows a vehicle or object by translating its kinetic energy into a form that can be either used immediately or stored until required. In the project we are applying this concept to one wheel which is rotating. Its mechanical rotary energy is converted into the electrical energy. This electrical energy can be stored and utilized in critical situations or to run the internal components present in the car. To develop and design this project we are using CATIA V5 CAD software. Then final manufacturing and testing will be done and results will be plotted out.

Keywords: Electric Vehicle, Torque, Regenerative Braking

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