

Speed Ratio Control of Pulley Based V-Belt Type Continuously Variable Transmission (CVT) using Fuzzy Logic Controller

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Abstract : After nearly more than a century of research and development, internal combustion engines have become almost perfect. Along with such improvement in internal combustion engines, automotive manufacturers are conducting research on design of alternative fuel vehicles. Nevertheless an ideal interim solution is to increase overall efficiency of internal combustion vehicles. A potential solution to achieve that is using continuously variable transmission system which, despite being an old idea, has recently become a hope for automotive manufacturers. CVT system, by continuously varying speed ratio, raises vehicle efficiency. In this study, fuzzy logic controller is used in speed ratio control of pulley based CVT system.

Keywords : continuously variable transmission system, variator, speed ratio, fuzzy logic

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