A Proposal and an Evaluation of the Efficiency of the Tesla Turbine Heat Recovery System

Kim, Yong-Wook (School: Korean Minjok Leadership Academy)
Min, Seongwoo (School: Korean Minjok Leadership Academy)
Kang, Junseok (School: Korean Minjok Leadership Academy)

A major problem with today's cars is the vast amount of heat generated and dissipated by the brakes. Not only is this energy completely lost, but prolonged functioning in the heat can also easily lead to the abrasion of brake disks. A tesla turbine appears to be an effective solution to these problems: it can transform both mechanical energy and thermal energy into its rotational kinetic energy. A tesla turbine around the brake disks could be connected to a generator and convert the rotational kinetic energy of the wheel and the heat energy produced from the frictional interaction into electric energy. This electric energy may be stored for later use when extra power is required. This research investigates the efficiency and the performance of such a tesla turbine heat recovery system.

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