

New Electric Motor Could Boost Efficiency of EVs, Scooters, and Wind Turbines

Article can be found here

https://spectrum.ieee.org/cars-that-think/transportation/advanced-cars/new-electric-motor-could-boost-efficiency-of-evs-scooters-and-wind-turbines?utm_source=techalert&utm_medium=email&utm_campaign=techalert-08-22-19&mkt_tok=eyJpIjoiTW1JMK9EVmpaRFJsT1RSaCIsInQiOiJnU1FOZXI5YmdNQINaMk9GTEZ1eHVvWHhtaERcLzNHemp5TjRTK0JrNDZUOVV6akRlcGI0dGM3OEhMOHlcL2txbEVFY0ZHU0Y2Y1h1dnI2OFF0STlJS1JCcytzR01SS1V4c1wwVE5kZ0xHaDRNd0hVS1BhQXU4YkIvejl1TDVUamMwdCJ9



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The Hunstable Electric Turbine by Linear Labs

- Every one is looking for batteries to be improved.
 - These people looked the motor
- The key is efficient use of copper in the motor
 - To do this the end windings are eliminated
 - Can generate two to five times the torque of existing motors in the same-size package, the company says
 - This allows transmissions and DC-DC Converters to be eliminated further reducing cost
- Linear Labs is working with others on applications

Linear Labs

- The Hunstables tick off a myriad of design and technical advantages for their HET, which they define as:
 - a 3D circumferential flux,
 - four-rotor permanent magnet motor.
 - Unlike typical designs, the synchronous DC motors have no superfluous end windings, so 100 percent of their copper material goes into energy conversion.
 - A typical motor's copper content could be reduced by 30 percent, while generating equivalent torque, they say.
 - So for a given torque level, the HET consumes significantly less energy than competing designs.
- Linear Labs is working with others on applications such as
 - Electric and micromobility vehicles,
 - Robotics
 - HVAC systems.