Mechanics, energy

ELECTROMAGNETIC ACTUATOR

Innovative electromagnetic actuator system with end-of-travel slaving system

Technological advantages

Exceptional performance compared to conventional permanent magnet technologies.

- Accuracy
- High efficiency
- Reliable
- Compact

Invention overview

The invention concerns a variable reluctance actuator developed for high-frequency applications. The design was optimized simultaneously taking into consideration the electromagnetic and mechanical functions, and by developing dedicated control electronics. The original structure of the actuator frames reduces the eddy current and Joule losses effects.

Electromagnetic actuator

Potential applications

Automotive and aeronautics sectors

- Injection or dosage of machine lubricant, brakes, gearboxes, and high-frequency valve control

Medical sector

- Medicine injection and dosage
- Generation of vibrations to mask or offset emitting sources
- Trigger

Commercial advantages

Embedded system

Weight gain

Volume gain

TRL : 5

Patented invention, available under license

B0618

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