



TECHNOLOGY AVAILABLE FOR LICENSING

Gear Bearing Drive

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Inventors: Constantinos Mavroidis, Brian Weinberg, John Vranish

Invention Details:

The invention relates to a compact actuator with high power density and precision. The gear bearing drive combines an advanced external rotor motor with NASA gear-bearing technology, to create a novel drive system with a maximum speed range of 5 to 8000 rpm. It can also operate as a powered joint due to its unique internal structure.

Benefits of the Invention:

This device has broad applications for the aerospace, space, manufacturing, transportation, and other industries. It is compact in size, and demonstrates high precision.

Advantages

- Increased reliability
 - Decreased part count, complexity
- Higher torque and speed
- Better cooling
- High power density and operation
- Can be optimized for specific applications
- Ultra-low power consumption

Applications

- Robotics, robotic arms
- Prosthetic limbs
- Power transmissions
- CNC (computer numerical controlled) manufacturing
- Industrial Machinery
- Precision positioning

The Bottom Line:

The proposed invention offers a significant advance in functionality over current actuator technology. Its compact form factor and its versatility lets engineers take full advantage of the gear bearing drives in existing and new applications.

For More Information:

Please contact:

Anthony N. Pirri, Ph.D.
Director, OTIC
Northeastern University
360 Huntington Ave, 960 RP
Boston, MA 02115-5000
Phone: 617-373-8810
Fax: 617-373-8866
Email: a.pirri@neu.edu

or

Constantinos Mavroidis, Ph.D.
Dept. of Mechanical & Industrial Engineering
Northeastern University
360 Huntington Avenue, 334 SN
Boston, MA 02115-5000
Phone: 617-373-4121
Fax: 617-373-2921
Email: c.mavroidis@neu.edu