

Title (en)
HIGH TORQUE ULTRASONIC MOTOR SYSTEM

Title (de)
ULTRASCHALLMOTORSYSTEM MIT HOHEM DREHMOMENT

Title (fr)
SYSTEME DE MOTEUR ULTRASONIQUE A COUPLE ELEVE

Publication
EP 0958649 A2 19991124 (EN)

Application
EP 97923449 A 19970417

Priority
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• US 63365096 A 19960417

Abstract (en)
[origin: WO9739520A2] The present invention is a compact, low mass, and low power consumption piezoelectric ultrasonic motor with high torque. The piezoelectric ultrasonic motor of the present invention includes a polarized piezoelectric drive ring or wafer comprised of a plurality of arc piece piezoelectric elements. The piezoelectric ultrasonic motor can utilize one or a plurality of piezoelectric wafers stacked as layers to increase the torque of the motor. Also, a series of the piezoelectric motors can be stacked and operated synchronously, as one motor, to maximize the torque within the volume, mass and power specification limitations of a specific application.

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