

Title (en)  
INERTIAL VOICE TYPE COIL ACTUATOR

Title (de)  
TRÄGHEITSTELLGLIED DES SCHWINGSPULENTYPUS

Title (fr)  
ACTIONNEUR DE BOBINE DE TYPE ACOUSTIQUE INERTIEL

Publication  
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Application  
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Abstract (en)  
[origin: WO2007070025A1] The present invention provides an inertial-type voice coil actuator (90) that includes a magnetic flux conductive material core (101) with a continuous channel (103). The channel (103) has antifringing groove. The actuator employs a radially polarized cylindrical magnet (105) spaced in the channel (103) to form a magnetic gap (124) and a conductive coil (106) positioned at least partially in the gap. A multi-component suspension system (92) provides high quality sound using an antifriction bearing (104), a viscous magnetic fluid, and a spider suspension (111). The inertial-type actuator is completed by an integrated mounting apparatus (94). In one embodiment, a receiver (114) and an output disk (112) are interlocked by helical wedges and the actuator is mounted on a sound board. The invention is further modified by the employ of high frequency speaker elements.

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