

Multi-Driver Transducer Having Symmetrical Magnetic Circuits and Symmetrical Coil Circuits

ABSTRACT

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A multi-driver transducer having symmetrical magnetic circuits and symmetrical coil circuits, wherein one or more pieces of circular or annular partitions made of a non-magnetic material are used to bond two or more sets of dual magnetic gap and dual coil driver units (01 or 02) into one integrated magnetic core. Four or more coaxial isodiametric annular magnetic gaps are formed between the inner circumferential face or outer circumferential face of one or two tubular magnetic yokes embedded in an open-end tubular thin wall of the bracket and the vertical circumferential face of an upper pole plate and a lower pole plate of the magnetic core, four or more coaxial and isodiametric coils are inserted in the four or more coaxial and isodiametric annular magnetic gaps, and the winding direction, connection manner, and necessary technical features of the coils are governed; thus, the multi-driver transducer having one or more pairs of mutually-repelling magnets, symmetrical magnetic circuits, and symmetrical coil circuits is constituted. Back electromotive force and inductance acquired via induction by the transducer during the working process are mutually offset. The transducer has resistive load features or near-resistive load features, and has super-high sensitivity, high resolution, and high-fidelity quality.

Fig. 6 for publication