

Title (en)  
ELECTROMAGNETIC SIGNAL CONVERTER FOR A BONE CONDUIT EARPIECE

Title (de)  
ELEKTROMAGNETISCHER SIGNALWANDLER FÜR EINEN KNOCHENLEITUNGSHÖRER

Title (fr)  
CONVERTISSEUR DE SIGNAL ELECTROMAGNETIQUE POUR UN OSSIVIBRATEUR

Publication  
**EP 3065420 B1 20200624 (DE)**

Application  
**EP 16158871 A 20160307**

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Abstract (en)  
[origin: US2016261958A1] The invention relates to an electromagnetic signal converter for an osteophone, comprising a soft magnetic yoke (1), an electrical coil (2) arranged concentrically to the longitudinal axis of the yoke (1), an elastically suspended, soft-magnetic armature (4) which, viewed in the direction of the longitudinal axis (5) of the yoke (1), is separated from the yoke (1) by a working air gap (8) and can move along the longitudinal axis (5) of the yoke (1), and a permanent magnet (9) which is magnetized in the direction of the longitudinal axis (5) of the yoke (1) in order to generate a magnetic biasing voltage of the yoke (1) and of the armature (4). In order to reduce the exciter output for the coil, it is provided that the permanent magnet (9) and the coil (2) do not overlap one another in the direction of the longitudinal axis of the yoke (1) and that means is provided for dividing the magnetic flux that can be produced by the coil (2) onto at least two flux paths, wherein one flux path runs outside of the permanent magnet (9), as a result of which the total magnetic resistance of the magnetic circuit is minimized, viewed from the coil (2).

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