

### Abstract

The present invention relates to an electromagnetic electro-acoustic transducer to be used for generating an incoming indicator tone for mobile phones and the like. A resin magnet 11 is formed with a hard magnetic material and a soft magnetic material, the lowest resonant frequency can be easily set by changing the magnetic flux density in a magnetic gap by changing the compound ratio of the soft magnetic material, a high magnetic flux density is attained by increasing the magnetic permeability of the resin magnet 11 with the soft magnetic material, thus achieving a smaller size as well as a higher sound pressure through an increase in the driving force exerted to the diaphragm.