

# Patent Application

## A method for acoustic antenna

### Summary

An innovative device is proposed for the efficient and effective production and transmission of acoustic vibrations within gases, liquid and gels. The device is based on the acoustic activation of a long wire, tube or rod, which is then capable of transmitting radial, axial and longitudinal vibrations within the gaseous, liquid or gel medium or environment. Through transfer of energy using a variety of acoustic waves forms from a “primary transducer” to another “secondary transducer”, and which are commonly fixed in a perpendicular and 90-degree construction, waves are created and transferred to an infinite number of points along the secondary transducer’s length.

By creating infinite points of vibration along the complete length of a long wire, tube or rod (several meters to 100’s of meters), it is now possible to effectively and efficiently transfer acoustic energy to the surrounding environment be it gaseous, liquid or gel, in an extremely effective manner. Furthermore, the straight wire, tube or rod transducers may be arranged in a multitude in such a way so that the effective active zone encompassing each of the transducers, overlap to form a new and combined, and active, 2D area or 3D volume. In addition, the wire, tube or rod transducers may be deformed by bending so as to form 2D or 3D structures, which will also create acoustically active 2D areas and 3D volumes within its gaseous, liquid or gel environment.