

**System and method for determining a representation
of an acoustic field**

ABSTRACT

This system for determining a representation of an acoustic field (P) comprises:

- acoustic wave acquisition means (1) comprising a plurality of elemental sensors (2_1 to 2_Q) which are distributed in space and which each deliver a measurement signal (c_1 to c_Q); and

5 - means (8) for processing by the application, to the measurement signals (c_1 to c_Q), of filtering combinations representative of structural characteristics of the acquisition means (1) in order to deliver a plurality of acoustic signals (sc_1 to sc_N) which are each associated with a predetermined general reproduction direction defined relative to a given point in space (14), the set of acoustic signals
10 (sc_1 to sc_N) forming a representation of the acoustic field (P).

The system is characterized in that the elemental sensors (2_1 to 2_Q) are distributed in space in a substantially non-regular manner and in that the filtering combinations are representative of that distribution.

Fig.2