

TRANSDUCER-BASED SENSOR SYSTEM WITH MULTIPLE DRIVE SIGNAL VARIANTS

5

ABSTRACT

A sensor system (10) including a plurality of transducer groups (12), with each transducer group (12) having a plurality of transducers (12a, 12b, 12c, 12d). The transducers (12a, 12b, 12c, 12d) of each group (12) are adapted to be placed in operative proximity with a sample material (14). Within each transducer
10 group (12), each transducer (12a, 12b, 12c, 12d) is actuable via application of a different phase-shifted variant (30a, 30b, 30c, 30d) of a local oscillator signal to the transducer. The sensor system is also configured so that, for each transducer group, the phase-shifted variants (30a, 30b, 30c, 30d) of the local oscillator signal are selectively employed during output processing to inhibit
15 cross-transducer interference occurring between simultaneously active transducers.

(Fig. 1)