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(54) **METHOD OF MANUFACTURE OF CONVECTIVE ACCELEROMETERS**

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(58) **Field of Search** 438/48, 49, 50, 438/51, 52, 53, 59; 257/417, 419, 420

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(57) **ABSTRACT**

A method is provided for the manufacture of a convective accelerometer and tilt sensor device using CMOS techniques. An integrated circuit chip is produced which includes a silicon substrate having an integrated circuit pattern thereon including a heater element located centrally of the substrate and at least first and second thermocouple elements located on the substrate on opposite sides of the heater element. Thereafter, portions of the substrate surrounding and beneath the heater and thermocouple elements are etched away to suspend the element on the substrate and thus to thermally isolate the elements from the substrate. The substrate is etched up to the cold thermocouple junction of the thermocouple elements so the cold junction remains on the substrate.

16 Claims, 2 Drawing Sheets

