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(54) **Title**: MINIATURE SENSOR TIP FOR MEDICAL DEVICES AND METHOD OF FORMING THE SAME

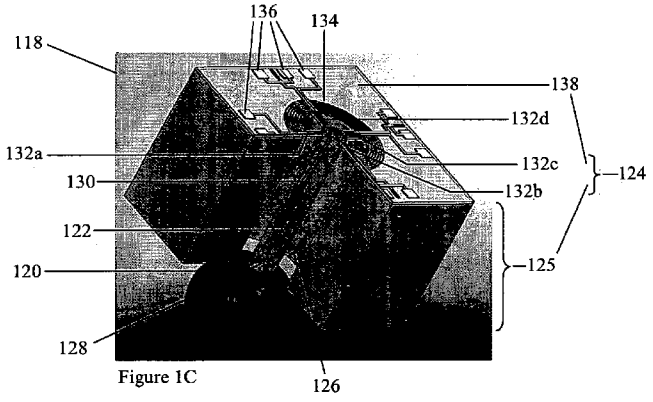


Figure 1C

(57) **Abstract**: According to embodiments of the present invention, a micro-sensory tip for use in blood vessels is provided. The micro-sensory tip includes: a force transmission element; at least three force detecting sensors coupled to the force transmission element, each of the at least three force detecting sensors responsive to force applied on the force transmission element, wherein each of the at least three force detecting sensors produces an output representing at least one force component of a three-dimensional Cartesian co-ordinate system, of the force experienced by the force transmission element, such that the outputs of the at least three force detecting sensors can cover the space of the three-dimensional Cartesian co-ordinate system; and an active element arrangement coupled to the at least three force detecting sensors, the active element arrangement configured to process the output from the at least three force detecting sensors.

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