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(54) Title: FIBER-OPTICAL SENSOR ARRAY FOR SENSING AND IMAGING

100A

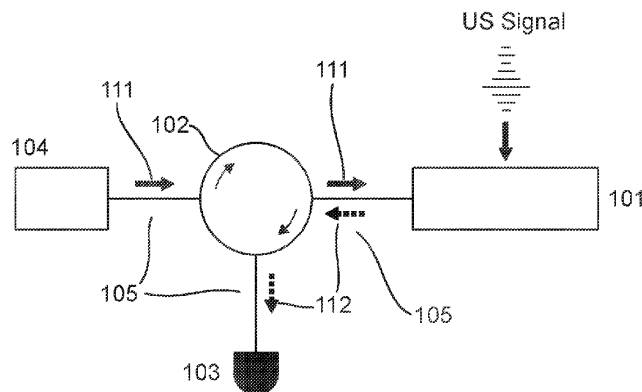


FIG. 1

(57) Abstract: Mixed sensor array devices are provided herein. Mixed sensor arrays as described herein include acoustic energy generating elements and optical fiber based acoustic sensors. Optical fiber based sensors may optical structures responsive to physical parameters including acoustic signals, pressure, and temperature, and are configured to detect and receive acoustic signals and other physical parameters and provide associated optical signals to a system for processing and interpretation to implement tracking, location, imaging, and other sensing capabilities. Optical fiber based sensors provided herein may be disposed at ends of or along the length of optic fibers. Optical fiber based sensors may be included within various devices, including, for example, medical devices.

[Continued on next page]

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