

- [54] TACTILE CONTROL DEVICE FOR A REMOTE SENSING DEVICE
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Related U.S. Application Data

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[57] ABSTRACT

The remote sensing device is added to a fibro-optic illuminating and viewing system such as a colonoscope. The directional sensing device is located in a flexible hood surrounding the distal end of the fiberscope. The sensor devices located in the hood at close spacings consist of semi-conductive digital foam sheath with electrodes located on its inside surface. The sheath and electrodes are attached to an ohmmeter so that when the instrument contacts with the wall, e.g. of a colon, the pressure is measured. The completed circuit forms a signal which is used to direct the distal end of the fiberscope in a direction away from the point of greatest resistance so as to follow the lumen with greater safety.

Contacts may also be positioned along the length of the endoscope so as to be activated by tension below the level of pressure required to disrupt the intestinal wall, or when used in other applications, at a level of pressure appropriate to that use.

20 Claims, 7 Drawing Figures

