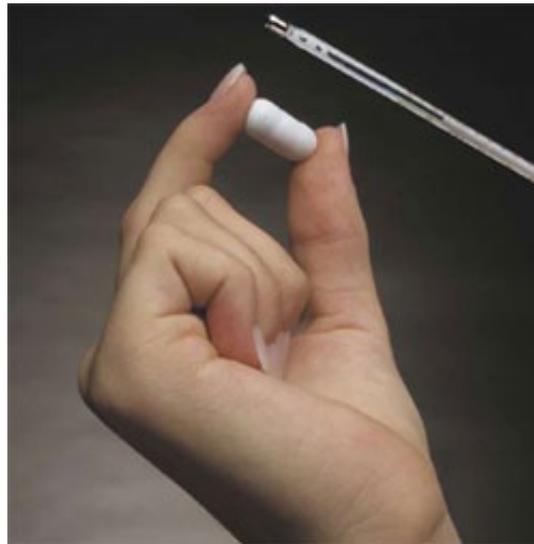




technology opportunity

Pill Transmitter

A Mechanical Image Transmitting Device that Reports the Exact Location and Angular Orientation within a Body



The pill transmitter relays images, as well as location coordinates and angular orientation associated with the mechanism, to doctors performing the procedure.

Medical imaging procedures now include, in some circumstances, provision of a sequence of images, in video format, of the interior of an organ through which the imaging mechanism passes. The images provided are often life-like and contain considerable detail. However, as yet no such imaging mechanism has provided, at the same time, location coordinates and/or angular orientation coordinates, associated with this mechanism, indicating where the mechanism is presently located and/or presently oriented, when a particular image is made. This location and/or orientation information would be useful in associating a location and/or orientation with a particular image where a troublesome or pathological organ condition is indicated by the image. This location and/or orientation information would also be useful in determining, on a first pass or on a second pass, a location and/or orientation where a particular medical treatment or pharmaceutical is to be delivered to the organ or a visibly perceptible image is to be made. The mobile signal transmitting device in this invention moves within a body, using minimal power to relay exact location and angular orientation without iterations and approximations.

Technology in Detail

The mobile pill transmitter system moves through one or more organs in a body and relays signals that pinpoint the pill's present location and/or present angular orientation. The system also provides signals from which the present roll angle of the pill, about a selected axis, can be determined. When the location coordinates and the roll angle of the pill are within selected ranges, an aperture on the pill container releases a selected chemical into or onto the body. Optionally, as the pill moves through the body it also provides a sequence of visually perceptible images.

Patents

This technology has been patented (U.S. Patent 7,616,982).

Licensing and Partnering Opportunities

This technology is part of NASA's Innovative Partnerships Program, which seeks to transfer technology into and out of NASA to benefit the space program and U.S. industry. NASA invites companies to inquire about licensing possibilities for this technology for commercial applications.

For More Information

If you would like more information about this technology, please contact:

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