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Handheld Surface Motion Tracking Apparatus And Method

Tech ID: 25658 / UC Case 2015-297-0

FULL DESCRIPTION

Researchers at the University of California, Irvine have developed a method to improve the capabilities of a handheld probe for greater accuracy. Currently, electromagnetic tracking systems and multi-camera motion capture systems are used. The disadvantage of the electromagnetic tracking system is that the magnetic fields can be disturbed by metal objects commonly found inside buildings and the cost of a multiple camera system is extremely high. The proposed system incorporates software to record and visualize motion paths of the handheld probe on the surface.

SUGGESTED USES

Medical imaging device for acquisition of surface measurement location.

ADVANTAGES

A major advantage of the system is the ability to use this method without interference for the patient or the tracking system with other metal objects in the room. This is a fundamental problem with electromagnetic tracking systems that cast a homogenous magnetic field. When compared to optical tracking systems, the proposed apparatus and method developed by UCI researchers eliminates the need for a direct line of sight from the camera onto the surface/measurement probe. The device can remain on the surface for increased accuracy of the measurements.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	11,160,470	11/02/2021	2015-297

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OTHER INFORMATION

CATEGORIZED AS

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