



ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

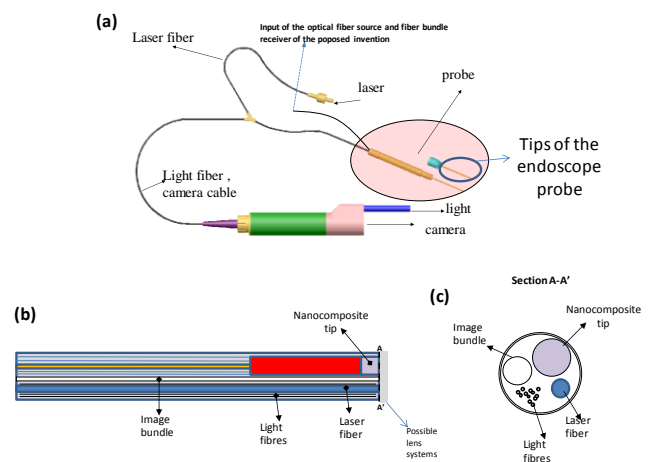
Innovative endoscopic system

INVENTORS

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DESCRIPTION

In the field of Smart Materials, IIT has developed an innovative tip integrating an optical fiber endoscope system based on nanocomposite materials. The nanocomposite tip enhances the optical light coming from an optical fiber source and couples the light backscattered by a generic 3D detected target. The integration of fiber optics and nanocomposite materials in a polymeric matrix is fully biocompatible and makes this device suitable, in particular, for medical endoscopic equipment.



APPLICATIONS

The Smart Materials workgroup has specifically developed this device for medial application, in particular skin cancer prevention and detection, and medical endoscopy. Other industrial applications are, for instance, in the field of pipes inspection for the oil&gas industry.

KEYWORDS

endoscopy, skin cancer prevention detection, pipes inspection, obstacle avoidance

BIBLIOGRAPHIC DATA TO2011A001178

Punta per un dispositivo di rilevamento ottico per il rilevamento ottico di un oggetto tridimensionale, particolarmente per uso in campo medico, e dispositivo di rilevamento ottico

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| Applicants | Fondazione Istituto Italiano di Tecnologia, Consiglio Nazionale delle Ricerche |

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