

INTERNAL OPTICAL SPECTROSCOPE & METHOD FOR REAL TIME IN-SITU DIAGNOSIS IN LIVING CELLS

INTRODUCTION

The conventional practice in suspected cancer diagnosis is to take a biopsy of the area in question for microscopic study at another place and time. Besides being invasive and traumatic, this technique requires several steps which can be time consuming and subject to error.

CONCEPT

The present method relates to an internal optical spectroscope comprising: a needle sleeve insertable into and removable from targeted living tissue; a shaft housed by the needle sleeve including at least one v-shaped trough including an aft side and a next-to-aft side; a light source comprising variable light wave lengths of both visible and near infrared light; at least one light transmission fiber comprising a transmitting end; at least one light detector fiber comprising a receptive end; and data processor. The present application also relates to a method of performing an optical biopsy in-situ.



INVENTION OVERVIEW

The invention is an internal optical spectroscope and the application relates to a method performing biopsy in-situ.

- · Limited damage to tissue
- Light source comprising variable light wave lengths of both visible and infrared light
- Internal Optical spectroscope
- Internal data processor
- U.S. Patent Number: Pending
- Application Number: 2015/0057553 A1
- Date of Patent: 26 Feb 2015

POTENTIAL MARKET

· Medical tools industries

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