

ESTIMATING APPARATUS AND ESTIMATING METHOD

Abstract

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[Object] To provide an estimating apparatus and an
5 estimating method capable of estimating process of
therapy using a laser the catheter 300 accurately in
real time.

[Solving Means] A photodynamic therapy apparatus 1 as an
estimating apparatus is an apparatus for irradiating a
10 tissue having absorbed photo-sensitive pharmaceutical,
the photo-sensitive pharmaceutical absorbing an
excitation light and emitting fluorescence, with the
excitation light emitted from a tip portion of a laser
the catheter 300, including a connector 210, a light
15 source 110, and a light detection unit 130. The laser
the catheter 300 is capable of being attached/detached
to/from the connector 210. The light source 110 outputs
the excitation light to the laser the catheter 300 via
the connector 210. The light detection unit 130 detects
20 intensity or a spectrum of the fluorescence, the
fluorescence being entered from the laser the catheter
300 via the connector 210, to estimate whether the
tissue has changed because of reaction between the
excitation light emitted from the tip portion of the
25 laser the catheter 300 and the photo-sensitive
pharmaceutical absorbed in the tissue.

Fig. 3