

Abstract

Otoscope and otoscopic method based on spectral analysis

5 The invention relates to an otoscope device, especially configured to be manipulated by a layperson during its application, comprising a radiation sensing unit configured for detecting radiation reflected by the patient's outer ear, especially by the eardrum; wherein the otoscope device further comprises electronic and/or optic means configured for determining spectral information of reflected radiation, especially with respect to
10 wavelengths shorter than 500nm to 480nm, and configured for determining a ratio of radiation in the spectrum below 480nm to 500nm to radiation in the spectrum above 480nm to 500nm, especially based on a specific intensity of reflected radiation within the spectrum of blue light and/or UV radiation. Further, the invention relates to a method of identifying and/or locating objects in a subject's ear or to a method of identifying or
15 characterizing an eardrum. Further, the invention relates to a method of determining the risk of a pathologic state of the eardrum and its vicinity and to provide the user with a risk index for inflammation.

(Fig. 1)