



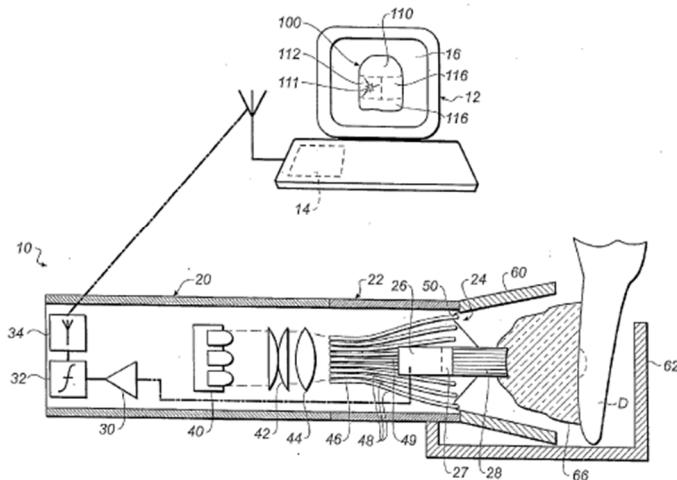
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Inglesse et al.(10) Pub. No.: **US 2010/0201986 A1**(43) Pub. Date: **Aug. 12, 2010**(54) **EQUIPMENT AND METHOD FOR
MEASURING DENTAL SHADE**(30) **Foreign Application Priority Data**

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G01N 21/25 (2006.01)(52) **U.S. Cl.** **356/407**(57) **ABSTRACT**

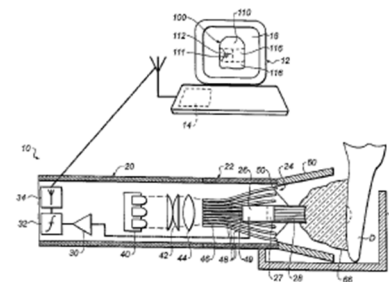
The invention relates to a device for measuring dental shade comprising:—illumination means (24, 40, 42, 44, 48, 50), for successively illuminating at least one part of a tooth (D) with light of various spectral ranges,—at least one sensor (26) sensitive to light coming from said tooth part, in response to the illumination, to generate for each different color of illumination, at least one measurement signal,—means (30, 32) for converting the measurement signals corresponding to said tooth part, into the coordinates of a measurement point (202), in a shade space in which “reference” points (320, 410, 540) are also defined, corresponding to the preset shades of a dental shade guide, and—search means (114), for the tooth part, for a shade corresponding to the reference point closest to the measurement point, in the shade space.

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(2), (4) Date: **Jan. 8, 2010**

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MEASURING DENTAL SHADE**(56) **References Cited****U.S. PATENT DOCUMENTS**

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- (58) **Field of Classification Search** **356/72-73,**
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- See application file for complete search history.
- (56) **References Cited**
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Pages, Aug. 17, 2004.
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- Primary Examiner**—Kara E Geisel
- (57) **ABSTRACT**
- The invention relates to a device for measuring dental shade
comprising:—illumination means (24, 40, 42, 44, 48, 50), for
successively illuminating at least one part of a tooth (D) with
light of various spectral ranges,—at least one sensor (26)
sensitive to light coming from said tooth part, in response to
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are also defined, corresponding to the preset shades of a
dental shade guide, and—search means (114), for the tooth
part, for a shade corresponding to the reference point closest
to the measurement point, in the shade space.
- 17 Claims, 3 Drawing Sheets**

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