

Title (en)
SYSTEM AND METHOD FOR DETERMINING A REFRACTIVE INDEX OF A MEASURED OBJECT

Title (de)
SYSTEM UND VERFAHREN ZUR BESTIMMUNG EINER BRECHZAHL EINES MESSOBJEKTS

Title (fr)
SYSTÈME ET PROCÉDÉ POUR DÉTERMINER UN INDICE DE RÉFRACTION D'UN OBJET MESURÉ

Publication
EP 2255174 A1 20101201 (DE)

Application
EP 09721047 A 20090316

Priority
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Abstract (en)
[origin: WO2009112288A1] A system (30) for determining an index of refraction (n (object)) of a measured object (31), comprising a light source (32) for issuing light (33) of a pre-defined wavelength, an integrated sensor element (35) with an optoelectronic sensor (36) and a layered structure (37) with at least one structured metal layer (44) wherein the optoelectronic sensor (36) and the layered structure (37) are commonly integrated on a semiconductor substrate (38), a device (39) for holding the measured object (31) between the integrated sensor element (35) and the light source (32) so that the layered structure (37) is disposed between the measured object (31) and the optoelectronic sensor (36), and so that an output signal from the optoelectronic sensor (36) to the light (33) with the pre-defined wavelength changes depending on the index of refraction (n(object)) of the measured object (31), and a device (40) for determining the index of refraction (n(object)) of the measured object (31) based on the output signal of the optoelectronic sensor (36).

IPC 8 full level
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Citation (search report)
See references of WO 2009112288A1

Citation (examination)
• US 2007014505 A1 20070118 - HOSOMI KAZUHIKO [JP], et al
• WO 2008030666 A2 20080313 - UNIV ILLINOIS [US], et al

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