

Title (en)

METHOD AND DEVICE FOR MEASURING THE THERMAL EFFUSIVITY OF A SURFACE UNDER STUDY

Title (de)

VERFAHREN UND VORRICHTUNG ZUM MESSEN DER WÄRMEABGABE EINER UNTERSUCHTEN OBERFLÄCHE

Title (fr)

PROCEDE ET DISPOSITIF DE MESURE DE L'EFFUSIVITE THERMIQUE D'UNE SURFACE D'ETUDE

Publication

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Application

EP 08856900 A 20081204

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- FR 0759603 A 20071206

Abstract (en)

[origin: WO2009071612A1] The invention relates to a method and a device for measuring the thermal effusivity of at least one volume of a surface under study (18). The method comprises making at least one contact of a predetermined duration between at least one tip (13) having a known thermal effusivity and submitted at the base thereof to a first temperature Tb, and the surface under study having a second temperature Ta lower than the first temperature Tb, and measuring the thermal exchange between said at least one tip and the surface under study, wherein the method comprises measuring the back-and-forth transit time of at least one bending acoustic wave that propagates inside said at least one tip up to the free end thereof in contact with the surface under study, a variation of the transit time following a temperature variation in the vicinity of said end.

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