

Title (en)

METHOD FOR DETERMINING A TRANSITION POINT AND/OR FOR DETERMINING WALL SHEAR STRESSES ON SURFACES AROUND WHICH SURFACES A FLOW CIRCULATES, AND MEASURING DEVICE

Title (de)

VERFAHREN ZUR BESTIMMUNG EINES TRANSITIONSPUNKTES UND/ODER VON WANDSCHUBSPANNUNGEN AN UMSTRÖMTEN FLÄCHEN UND MESSVORRICHTUNG

Title (fr)

PROCÉDÉ SERVANT À DÉTERMINER UN POINT DE TRANSITION ET/OU DES CONTRAINTES DE CISAILLEMENT À LA PAROI SUR DES SURFACES EXPOSÉES À UN FLUX ET DISPOSITIF DE MESURE

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Application

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Abstract (en)

[origin: WO2014198251A1] The invention relates to a method for determining a transition point and/or for determining wall shear stresses on surfaces (1) around which surfaces a flow circulates by means of thermography, wherein the method comprises the following steps: providing a surface with a heat insulation layer (3) on the surface (1) around which a flow is to circulate, circulating a flow around the surface (1) around which a flow is to circulate, heating the surface (1) around which a flow circulates, contactless measuring of the emitted flow intensity of the surface (1) around which a flow circulates by means of a camera system (7), determining at least one temperature decay coefficient on the surface (1) around which a flow circulates and ascertaining the transition point and/or the wall shear stresses on the surface (1) around which a flow circulates. The invention further relates to a method for determining a transition point and/or for determining wall shear stresses on surfaces around which a flow circulates and/or the qualitative representation of the heat transfer into the flow.

IPC 8 full level

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