

Title (en)

METHOD FOR MEASURING THE THICKNESS OF A DISCOIDAL WORKPIECE

Title (de)

VERFAHREN ZUM MESSEN DER DICKE EINES SCHEIBENFÖRMIGEN WERKSTÜCKS

Title (fr)

PROCÉDÉ DE MESURE DE L'ÉPAISSEUR D'UNE PIÈCE À USINER EN FORME DE DISQUE

Publication

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Application

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Abstract (en)

[origin: WO2010037452A1] The invention relates to a method for measuring the thickness of a discoidal workpiece serving as a substrate for electronic components, comprising the steps: Infrared radiation is applied to the top surface of the workpiece, wherein a first radiation component is reflected at the top surface and a second radiation component penetrates the workpiece thickness, is reflected at the bottom surface of the workpiece, and exits the top surface of the workpiece again, the first and the second radiation components interfere with each other forming an interference pattern, and the optical workpiece thickness between the top surface and bottom surface of the workpiece is determined using the interference pattern. According to the invention, the mechanical workpiece thickness is determined from a measurement of the intensity of the reflected and/or transmitted infrared radiation, considering the optical workpiece thickness.

IPC 8 full level

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Citation (search report)

See references of WO 2010037452A1

Citation (examination)

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- QUANDOU WANG ET AL: "<title>Interferometric thickness calibration of 300 mm silicon wafers</title>", PROCEEDINGS OF SPIE, vol. 6024, 9 December 2005 (2005-12-09), pages 602426 - 602426-5, XP055090969, ISSN: 0277-786X, DOI: 10.1117/12.666951

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