

Title (en)

APPARATUS AND METHOD FOR MEASURING A SUBSTRATE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR VERMESSUNG EINES SUBSTRATS

Title (fr)

APPAREIL ET PROCÉDÉ DE MESURE D'UN SUBSTRAT

Publication

**EP 4065957 A1 20221005 (DE)**

Application

**EP 19813462 A 20191128**

Priority

EP 2019082881 W 20191128

Abstract (en)

[origin: WO2021104631A1] The invention relates to a method for measuring a multilayer substrate (1,1',1''), in particular having at least one structure (7, 7', 7'', 7''', 7IV, 7V) of critical dimensions, in particular having a surface structure (7, 7', 7'', 7''', 7IV, 7V) of critical dimensions, characterized in that the method comprises at least the following steps, in particular the following sequence of steps: producing (110) the substrate (1,1',1'') having multiple layers (2, 3, 4, 5, 6, 6', 6''), in particular having a structure (7, 7', 7'', 7''', 7IV, 7V), in particular having a structure (7, 7', 7'', 7''', 7IV, 7V) on a surface (6o, 6'o, 6''o) of a top layer (6,6',6''), the dimensions of the layers and in particular of the structures being known, measuring (120) the substrate (1,1',1''), and in particular the structure (7, 7', 7'', 7''', 7IV, 7V), by way of at least one measuring technique, generating (130) a simulation of the substrate by means of the results obtained by measuring the substrate (1,1',1''), comparing (140) the measurement results with simulation results originating from the simulation of the substrate (1,1',1''), optimizing the simulation (130) and again generating (130) a simulation of the substrate by means of the results obtained by measuring the substrate (1,1',1'') if the measurement results deviate from the simulation results, or calculating (150) parameters of other substrates if the measurement results correspond to the simulation results.

IPC 8 full level

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