

Title (en)

METHOD AND APPARATUS FOR THE CONTACTLESS MEASURING AND OPTIONALLY MACHINING OF SURFACES

Publication

**EP 0346819 A3 19911127 (DE)**

Application

**EP 89110657 A 19890613**

Priority

DE 3820225 A 19880614

Abstract (en)

[origin: JPH02118407A] PURPOSE: To achieve the non-contact measuring method of a surface for measuring an arbitrarily formed surface accurately and inexpensively by measuring the interval of a reference contour from the measurement range of the surface while measuring it by an interferometer and determining each difference between a measurement value and a target value. CONSTITUTION: First, the reference contour of at least one reference element essentially corresponding to the measurement range of a surface is measured by an interferometer regarding a known standard contour where an external form is known within the allowable range of the surface. Then, a surface to be measured is moved to a position that is limited in terms of space regarding a reference element. Then, the interval of the reference contour from the measurement range of the surface is measured while being increased from the interferometer and each difference between a measurement value and a target value is determined, thus measuring the actually measured contour of the work surface and at the same time controlling a machining tool during process until a desired target contour is obtained in some cases.

IPC 1-7

**B24B 13/015**

IPC 8 full level

**G01B 11/24** (2006.01); **B24B 13/015** (2006.01); **B24B 49/04** (2006.01)

CPC (source: EP US)

**B24B 13/015** (2013.01 - EP US); **B24B 49/04** (2013.01 - EP US)

Citation (search report)

- [A] GB 2175687 A 19861203 - SUHL FEINMESSZEUGFAB VEB
- [A] FR 2448417 A1 19800905 - INST KOSM I [SU]
- [A] MESSTECHNIK, Band 81, Nr. 1, Januar 1973, Seiten 23-30, München, DE; K. ECKOLT et al.: "Verfahren zur Ebenheitsmessung"

Designated contracting state (EPC)

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DOCDB simple family (publication)

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