

Title (en)  
FULL-FIELD HETERODYNE INTERFEROMETER FOR INSPECTING AN OPTICAL SURFACE

Title (de)  
VOLLFELD-HETERODYNINTERFEROMETER ZUR INSPEKTION EINER OPTISCHEN OBERFLÄCHE

Title (fr)  
INTERFÉROMÈTRE HÉTÉRODYNE PLEIN CHAMP POUR INSPECTER UNE SURFACE OPTIQUE

Publication  
**EP 3899420 A1 20211027 (EN)**

Application  
**EP 19823930 A 20191129**

Priority  
• GB 201820515 A 20181217  
• GB 2019053395 W 20191129

Abstract (en)  
[origin: WO2020128423A1] A device (200) and method for inspecting an optical surface (232) of an optical element (230) or an optical system is presented. The device (200) includes a source of electromagnetic radiation (210), a sensor (240) that includes a plurality of phase detectors forming a two dimensional array, and an interferometric optical arrangement (220) for forming an interference beam. The source of electromagnetic radiation (210) provides a first beam having a first frequency and a second beam having a second frequency. The interferometric optical arrangement (220) has an input optically coupled to the source of electromagnetic radiation and an output optically coupled to the sensor. Each phase detector in the two dimensional array is adapted to perform heterodyne phase demodulation of a different region of the interference beam in parallel with the other phase detectors.

IPC 8 full level  
**G01B 9/02** (2006.01); **G01B 11/16** (2006.01); **G01B 11/24** (2006.01); **G01M 11/00** (2006.01); **G01N 21/88** (2006.01); **G01N 21/95** (2006.01)

CPC (source: EP GB)  
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Citation (search report)  
See references of WO 2020128423A1

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