

Title (en)  
SYSTEM AND METHODS OF PHASE DIVERSITY WAVEFRONT SENSING

Title (de)  
SYSTEM UND VERFAHREN ZUR PHASENDIVERSITÄTS-WELLENFRONTMESSUNG

Title (fr)  
SYSTÈME ET PROCÉDÉS DE DÉTECTION DE FRONT D'ONDE DE DIVERSITÉ DE PHASE

Publication  
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Application  
**EP 08844854 A 20081028**

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Abstract (en)  
[origin: WO2009058747A1] A phase diversity wavefront sensor includes an optical system including at least one optical element for receiving a light beam; a diffractive optical element having a diffractive pattern defining a filter function, the diffractive optical element being arranged to produce, in conjunction with the optical system, images from the light beam associated with at least two diffraction orders; and a detector for detecting the images and outputting image data corresponding to the detected images. In one embodiment, the optical system, diffractive optical element, and detector are arranged to provide telecentric, pupil plane images of the light beam. A processor receives the image data from the detector, and executes a Gerchberg- Saxton phase retrieval algorithm to measure the wavefront of the light beam.

IPC 8 full level  
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CPC (source: EP)  
**G01J 9/00** (2013.01); **G01J 2009/002** (2013.01); **G01J 2009/0203** (2013.01)

Citation (search report)  

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- See references of WO 2009058747A1

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