

Title (en)

METHOD AND ARRAY FOR THE DETECTION OF FOREIGN GAS IN OPTICAL IMAGING AND/OR BEAM CONTROL SYSTEMS

Title (de)

VERFAHREN UND ANORDNUNG ZUR FREMDGASERKENNUNG IN OPTISCHEN ABBILDUNGS- UND/ODER STRAHLFÜHRUNGSSYSTEMEN

Title (fr)

PROCEDE ET DISPOSITIF DE RECONNAISSANCE DE GAZ ETRANGER DANS DES SYSTEMES OPTIQUES DE FORMATION D'IMAGES ET/OU DE GUIDAGE DE FAISCEAUX

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Application

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Abstract (en)

[origin: WO03058213A1] The invention relates to a method and an array for detecting foreign substances in the beam path of optical imaging or beam control systems (10), in which the housing enclosing the beam path and the optical components (10') is filled or flushed with a protective gas. Said protective gas is exposed to an intensity-modulated electromagnetic analytical wavefield (4') in a test volume (3). A photoacoustic signal (5) is generated for detecting impurities or foreign gases by means of the photoacoustic effect created when frequency components of the analytical wavefield (4') are absorbed by said foreign gases and/or impurities.

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