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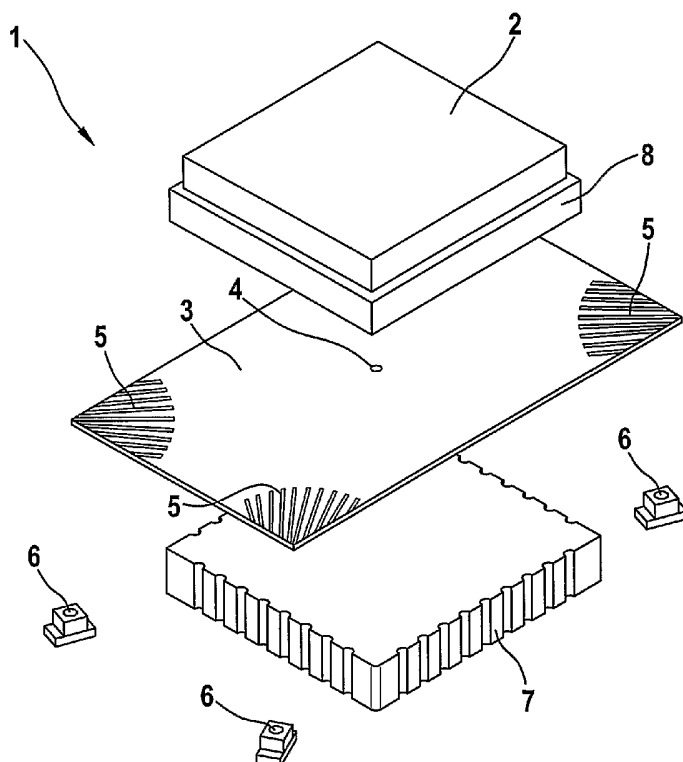
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(54) Title: SYSTEM AND METHOD FOR OPTICALLY IMAGING OBJECTS ON A DETECTION DEVICE BY MEANS OF A PINHOLE APERTURE



(57) Abstract: The invention describes systems and methods for optically imaging objects and in particular optical patterns or codes onto a detection device by means of a pinhole aperture. According to the invention these systems have optical attenuation elements between the illumination devices and the object which substantially compensate the system-inherent imaging defects caused by the pinhole aperture and in particular the system-inherent peripheral decrease in brightness of an image of the object formed by a pinhole aperture on the detection device. According to the invention the optical attenuation elements change the illumination intensity of the object in such a manner that the central areas of the object are illuminated at a lower light intensity than its peripheral areas. As a result of the subsequent imaging of the object by means of a pinhole aperture, the central areas of the object are imaged onto the detection device at a higher light intensity than the peripheral areas of the object. The superimposition of the two effects enables the imaging system according to the invention to achieve a substantially uniform system-inherent brightness distribution on the detection device.

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RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 810 084 A (NYUI ET AL) 7 March 1989 (1989-03-07) abstract column 3, line 36 - column 4, line 41 figures 1-8	1-12
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 10, 30 November 1995 (1995-11-30) & JP 07 167788 A (COPAL CO LTD), 4 July 1995 (1995-07-04) abstract ----- -/--	1-12

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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