

Title (en)
ACQUISITION OF OPTICAL CHARACTERISTICS

Title (de)
ERFASSUNG VON OPTISCHEN EIGENSCHAFTEN

Title (fr)
ACQUISITION DE CARACTÉRISTIQUES OPTIQUES

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Application
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Abstract (en)
[origin: WO2023007137A1] A method for obtaining a reflectance map and a photometric normal map of an object (4). The method includes receiving two or more images of the object (4). Each image is obtained from the same viewpoint. The images show the object illuminated using three or more illumination conditions. The illumination conditions include a first illumination condition in the form of a binary pattern along a first direction. The illumination conditions also include a second illumination condition in the form of binary pattern along a second direction which is different to the first direction. The illumination conditions also include at least one selected from: a third illumination condition which is a complement of the first illumination condition; a fourth illumination condition which is a complement of the second illumination condition; and a fifth illumination condition which is a uniform illumination condition. The method also includes calculating the reflectance map and the photometric normal map of the object (4) based on the set of images. All of the illumination conditions are applied to the object (4) from a hemisphere, or from a zone (18) which is less than a hemisphere. Each of the first and second directions is substantially orthogonal to a reference line extending from the object (4) at an angle within the zone (18).

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