

Title (en)

METHOD AND DEVICE FOR A 3D MEASUREMENT OF THE SKIN SURFACE AND SKIN LAYERS CLOSE TO THE SURFACE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR 3 D-VERMESSUNG DER HAUTOBERFLÄCHE UND OBERFLÄCHENNAHER HAUTSCHICHTEN

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LA MESURE EN 3D DE LA SURFACE DE LA PEAU ET DE COUCHES DE PEAU PROCHES DE LA SURFACE

Publication

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Application

**EP 14731152 A 20140512**

Priority

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Abstract (en)

[origin: WO2014183860A1] The invention relates to a method for a 3D measurement of the skin surface and skin layers close to the surface using a confocal sensor which is arranged in a handheld device and which comprises an integrated color camera. A sensor head of the handheld device is moved towards the skin area to be examined by the operator, and a color image of the skin surface is captured. The sensor then automatically switches to a confocal operation in which an image stack is captured, wherein the image stack, which extends into the skin interior, consists of a plurality of confocal images that are generated by a simultaneous detection of all the pixels required for a complete image, and the entire region which extends axially into the interior of the skin is scanned layer by layer in the Z direction. An analysis is carried out after the measurement data is captured such that a 3D image of the topography of the skin is generated. Furthermore, sectional images of the skin and of a skin volume to a depth of multiple millimeters is calculated from the captured image stack, and the images generated in this manner are displayed on a monitor.

IPC 8 full level

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Citation (search report)

See references of WO 2014183860A1

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