

Title (en)

METHOD AND DEVICE FOR QUANTIFYING A WEAR LEVEL OF A BRISTLE FIELD OF A BRUSH

Title (de)

VERFAHREN UND VORRICHTUNG ZUR QUANTIFIZIERUNG EINES ABNUTZUNGSGRADS EINES BORSTENFELDS EINER BÜRSTE

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR QUANTIFIER UN NIVEAU D'USURE D'UN CHAMP DE POILS D'UNE BROSSE

Publication

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Application

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Priority

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Abstract (en)

A method and device for quantifying a wear level of a bristle field of a brush are disclosed comprising a plurality of bristle tufts grouping each a plurality of single bristles, said bristle tufts being distributed over the bristle field, the method comprising the following steps: - recording and storing an image of the bristle field; - converting the image into a gray scale image by use of digital image processing and storing the gray scale image; - converting the gray scale image to at least one binarized image with only two tone values by use of digital image processing, thereby assigning one tone value to bristles and/or bristle tufts visible in the image and the other tone value to the background in the image not showing bristles or bristle tufts, and storing the binarized image; - applying the following evaluation method: determining the geometrical splay of the bristle field (3) by creating a contour image, wherein the contour of the image is determined by edge detection of the grey scale image by use of digital image processing, - comparing the results of the applied evaluation method with reference data of an unused brush and/or of used brushes with determined wear levels to classify the wear level of the bristle field of the brush.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

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