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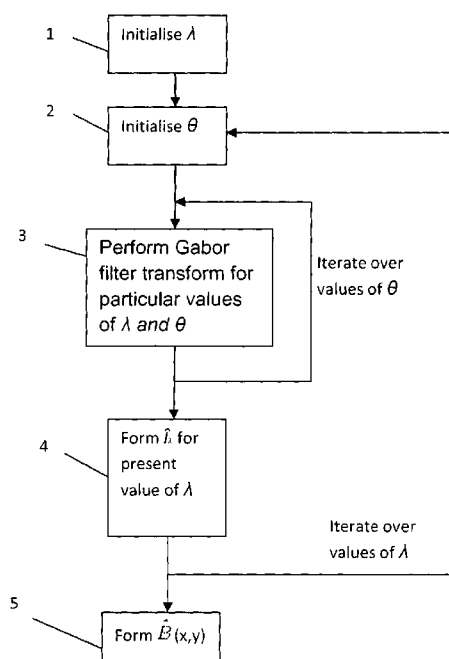
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(54) Title: COMPUTATIONAL METHODS AND APPARATUS FOR MEIBOGRAPHY



(57) Abstract: An ocular image of a region including meibomian glands is processed automatically. The processing may derive a grade indicative of the health of the meibomian glands, by using in the ocular image to obtain one or more numerical parameters characterizing the meibomian glands shown in the ocular image, and determining the grade using the one or more numerical parameters. The numerical parameters include a parameter characterizing the diversity between scale parameters of significant features of the image obtained by a scale-space transform, and/or parameters obtained by measurement of lines in the ocular image representing respective glands. Meibomian glands can be identified on ocular images using Gabor filtering as a local filtering technique. The parametrization in shape, local spatial support, and orientation of Gabor filtering is particularly suitable for detecting meibomian glands.



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