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(54) Title: METHOD AND SYSTEM FOR SINGLE VIEW IMAGE 3 D FACE SYNTHESIS

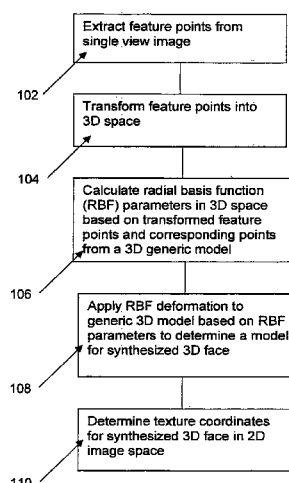


Figure 1

(57) Abstract: A method and system for of single view image 3D face synthesis. The method comprises the steps of a) extracting feature points from the single view image; b) transforming the feature points into 3D space; c) calculating radial basis function (RBF) parameters in 3D space based on the transformed feature points and corresponding points from a 3D generic model; d) applying RBF deformation to the generic 3D model based on the RBF parameters to determine a model for the synthesized 3D face; and e) determining texture coordinates for the synthesized 3D face in 2D image space; wherein step b) comprises symmetrically aligning the feature points, and step e) comprises projecting the generic 3D model or the model for the synthesized 3D face into 2D image space and applying RBF deformation to the projected generic 3D model or the projected model for the synthesized 3D face.