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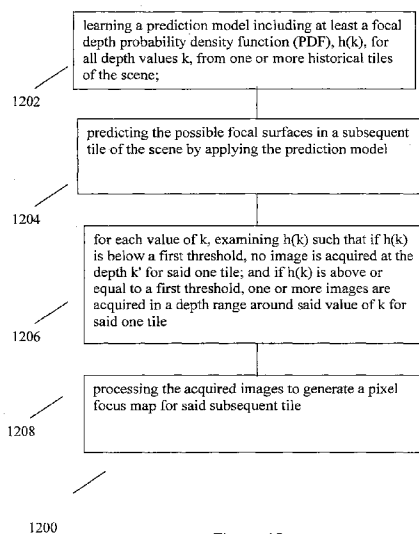
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(54) Title: A METHOD AND SYSTEM FOR GENERATING AN ENTIRELY WELL-FOCUSED IMAGE OF A LARGE THREE-DIMENSIONAL SCENE



(57) Abstract: A method and system for generating an entirely well-focused image of a three-dimensional scene. The method comprises the steps of a) learning a prediction model including at least a focal depth probability density function (PDF), $h(k)$, for all depth values k , from historical tiles of the scene; b) predicting the possible focal surfaces in subsequent tiles of the scene by applying the prediction model; c) for each value of k , examining $h(k)$ such that if $h(k)$ is below a first threshold, no image is acquired at the depth k' for said one tile; and if $h(k)$ is above or equal to a first threshold, one or more images are acquired in a depth range around said value of k for said one tile; and d) processing the acquired images to generate a pixel focus map for said one tile.

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