

ABSTRACT

The present invention introduces an apparatus and a method for simultaneous localization and mapping, the apparatus comprising: a sensor unit that photographs the surroundings of a moving object and is capable of adjusting a parameter for a photographing condition; a parameter adjustment unit for adjusting the parameter so that a visual field condition is satisfied; and a visual map generating unit for generating a visual map configured such that one or more features each having a plurality of models are connected to each other, wherein the location of the moving object is estimated by matching between an extracted feature and the feature of the visual map.

Fig. 1