

ABSTRACT

[00113] A method and system for autonomous parking are disclosed. The system employs Homography guided motion segmentation (HGMS) to determine the availability of a parking slot. A free parking slot is determined based on an occupancy status check and identified structures of parking lines. For example, motion analysis is performed on successive images captured by a camera unit to determine the occupancy status of a parking slot. Information of the free parking slot, for example, the dimensions and orientation, may be determined from identifying the structure of parking lines. This information is used by the system to guide a vehicle from its current location to the detected free parking slot.