**WHAT IS CLAIMED IS:**

1. A control method of an orientation of a vehicle employing active suspension, wherein the vehicle has three or more wheels, the wheels are divided into three groups, which constitute three support points for supporting a vehicle body; heights of the three support points are controlled to control an orientation of the vehicle body; each of the wheel groups has one wheel or multiple wheels therein, when the number of wheels in some wheel group is greater than one, upper chambers and lower chambers of each of a suspension servo actuation cylinder in the wheel group are respectively communicated, and the wheel group forms a support point for supporting the vehicle body, three wheel groups form three support points, so that the orientation of the vehicle body is controlled according to a principle that a plane is determined by three points,

2the vehicle comprises a vehicle body, an inertial measurement device, an electronic control device, a servo controller set, multiple wheels, suspension servo actuation cylinders and displacement sensors respectively corresponding to the wheels, wherein the wheels are connected to a lower part of the vehicle body via the suspension servo actuation cylinders, and the displacement sensor is used to measure strokes of the suspension servo actuation cylinders, the electronic control device and servo controller set are secured to the vehicle body, the electronic control device is in communication with the inertial measurement device and the servo controller set, and the servo controller set is in communication with the displacement sensor, the electronic control device reads an orientation parameter measured by the inertial measurement device, calculates an amount of extension/retraction of each of the suspension servo actuation cylinders required to cause the vehicle body to return to a horizontal level, and

outputs it to servo controller set, thereby controlling the extension/retraction of each of the suspension servo actuation cylinders,

when the wheel groups are formed, a structure of the wheels in each of the wheel groups and the suspension servo actuation cylinders corresponding thereto and the displacement sensors are the same, and a support point supporting the vehicle body in each of the wheel groups is a geometric center point of the support point of each of the suspension servo actuation cylinders in the group to the vehicle body, and the height of the support point is controlled by controlling an average amount of extension/retraction of each of the suspension servo actuation cylinders in the group, the inertial measurement device measures a pitch angle and a roll angle of an in-vehicle stable platform during the vehicle travels, thereby calculating amounts of extension/retraction of respective suspension servo actuation cylinders required to cause the vehicle body to return to a horizontal level and controlling the extension/retraction of the respective suspension servo actuation cylinders to maintain the vehicle body horizontal during traveling.