ABSTRACT

A speed reducer assembly (100) is provided, including a speed reducer body (110) and a differential (120) which are connected to each other, where the speed reducer body at least includes a second-stage driven gear (111), and the differential includes a differential case (121) and a gear assembly located in the differential case, the differential case and the second-stage driven gear being connected by means of welding. Connecting the second-stage driven gear of the speed reducer body to the differential case by means of welding can reduce the use of bolts in the speed reducer assembly, reduce the total weight of the speed reducer assembly, reduce the load of a vehicle, and extend the vehicle's endurance. A speed reducer device (200) arranged in the speed reducer assembly is provided, where the speed reducer device includes a first driven gear (212) and an intermediate rotating shaft (220), the periphery of one end of the intermediate rotating shaft has external spline teeth (221), and the first driven gear has a spline hole cooperating with the external spline teeth; the first driven gear and the intermediate rotating shaft are connected through the cooperation of the external spline teeth and the spline hole; and the external spline teeth are helical teeth. The helical external spline teeth can increase a cooperation width with the internal spline teeth, thereby increasing the tightness of the cooperation between the external spline teeth and the internal spline teeth, and preventing abnormal sound caused by loose cooperation between the intermediate rotating shaft and the first driven gear. Further provided is a vehicle including the speed reducer assembly.

Fig. 5