

Abstract

A locating seat (1, 10), a locating pin (2, 20), a locating mechanism (3, 30), a quick-change support assembly (4, 10, 40), and an electric automobile. The locating seat (1, 10) is used for locating and fixing a battery pack (51, 61). The locating seat (1, 10) is used for accommodating the locating pin (2, 20) for fixing the battery pack (51, 61). An opening (12) and a slideway (11) extending from the opening (12) are formed in the side surface of the locating seat (1, 10), and the opening (12) is used for the locating pin (2, 20) to enter the slideway (11). A first limiting part (13) is provided in the slideway (11) and is used for limiting the locating pin (2, 20) to be separated from the locating seat (1, 10) along the axial direction. The first limiting part (13) is provided on the locating seat (1, 10), and the limitation on the moving direction of the locating pin (2, 20) is realized by utilizing the first limiting part (13), so that the locating pin (2, 20) cannot be separated from the locating seat (1, 10) along the axial direction thereof, and the battery pack (51, 61) using the locating pin (2, 20) is fixed in the axial direction. The movement direction of the battery pack (51, 61) is reduced, the complexity of the movement state of the battery pack (51, 61) is reduced, the service life of the battery pack (51, 61) is prolonged, and the damage probability of the battery pack (51, 61) is reduced. Moreover, the reason why the battery pack (51, 61) fails can be analyzed.

Fig. 7