

Abstract

Provided is a lock mechanism, wherein the lock mechanism includes a lock base, the lock base is provided with an opening and a cavity extending from the opening, the opening is used for the lock shaft mounted to the battery pack to enter the cavity, the lock mechanism further includes: a lock assembly, the lock assembly is connected to one side of the lock base opposite the lock shaft, the lock assembly is moveable relative to the lock base, and the side of the lock base opposite the lock shaft extends into the cavity or exits the cavity; wherein, the lock assembly is capable of preventing the lock shaft from exiting the cavity from the opening when the lock assembly extends into the cavity; the lock assembly is capable of allowing the lock shaft to exit the cavity from the opening when the lock assembly exits the cavity. The lock mechanism is capable of preventing the install and lock of the prior battery pack from being easily failed, which may cause the battery pack to loose or fall off, so that the lock reliability of the battery pack is improved. Provided are also a lock system comprising the above lock mechanism, a quick exchange bracket assembly and an electronic vehicle.