

Abstract

A battery replacement device unlocking apparatus, a battery replacement device and a battery box quick battery replacement system. In the battery replacement device unlocking apparatus, a driving element is connected to a transmission mechanism and drives same to move, and the transmission mechanism is connected to an unlocking bar and drives same to expand and retract. In the battery replacement device, a housing and a battery replacement device suction cup are provided on a battery tray, the battery replacement device unlocking apparatus is provided in the housing, the battery replacement device suction cup is connected to the housing by means of the battery replacement device unlocking apparatus, and the battery replacement device suction cup is sleeved on the unlocking bar, and the unlocking bar expands and retracts in the battery replacement device suction cup. In the battery box quick battery replacement system, a battery box comprises a locking tongue and a linked unlocking button, the unlocking button being provided correspondingly to the unlocking bar; a battery box fixing frame has a locking part which is in locked engagement with the locking tongue; the unlocking bar expands to press the unlocking button, so as to drive the locking tongue to disengage from the locking part to unlock. The battery replacement device unlocking apparatus, the battery replacement device, and the battery box quick battery replacement system have high unlocking accuracy and high battery replacement efficiency.