

Abstract

The present utility model relates to the technical field of logistics transportation, and discloses an automatic canopy tilting mechanism and an unmanned vehicle. In view of unmanned operation, the cargo loading and unloading process should be simple and fast, and convenient to manage. The unmanned vehicle is provided with a canopy module, which can cover a transport box cage and protect the transport box cage against rain and snow; a frame is rotatably connected with the unmanned vehicle, and a tilting module configured to fix the transport box cage is movably arranged on a load-bearing vehicle body; a second roller is disposed at the top of a side surface and can slide along the first slide rail to jack up the canopy module; after the second roller slides out of the first slide rail, the first roller on the frame near the tail of the vehicle slidably engages with a second slide rail disposed on the side surface of the tilting module, till the tilting module is perpendicular to the load-bearing vehicle body; thus, the automatic canopy tilting mechanism is transited from a loading state to an unloading state, so that the canopy module can be opened and closed automatically by means of the movement and turnover of the tilting module. The present disclosure has high reliability and high stability, and a relatively low manufacturing cost.

Fig. 2