

Introduction to Inventions and Creations

Title of work: Automatically change charging cable mobile phone case

Field: Home and Life

Source of inspiration for invention:

From life--I went to a relative's house with my parents before, and my dad's mobile phone ran out of power, but the charging cable of the relative's house did not match the charging port of my dad's mobile phone. I have encountered this situation several times afterwards. Improve life--so I decided to design a mobile phone case to ensure that all types of charging cables can be charged.

Production process:

(1) Buy the required circuit boards and three kinds of mobile phone charging adapters online;

(2) Use programming software to write conversion program and test; (3) Connect the transfer interface to the circuit board, and after testing, fix it with hot melt glue;

(4) According to the fixed circuit board, design the size of the mobile phone case and draw the three-dimensional graphics; (5) Use a 3D printer to print a three-dimensional model; (6) Install the circuit board on

the phone case and perform the final test.

The function of the work:

The bottom of the mobile phone case is divided into internal and external. The internal connector can be docked with the charging port of the mobile phone. The outer end of the bottom of the mobile phone case has three types of ports, corresponding to the ports of the three types of chargers on the market, and any charging port can be used. Charge it.

Advantages of the work:

- (1) The mobile phone wrapped in the mobile phone case can be charged with any kind of charging cable, which is very inclusive;
- (2) There is not much difference between using a charging cable to charge the mobile phone wrapped in the phone case and the use of a normal charging cable, and it is very convenient to use;
- (3) There is no need to borrow a three-way switch cable, use the original cable to charge, and the charging effect is good;
- (4) The charging circuit board is integrated with the mobile phone case, which is beautiful and easy to damage.

Remarks:

(1) This work has three charging ports, you can usually use the corresponding plug to block the charging port, whichever charging port needs to be used, open the corresponding charging port to prevent dust from entering it;

(2) The middle part of this work is also designed with a retractable structure, which is suitable for most mobile phones, so there is no need to worry about the problem of inappropriate size.

