

ABSTRACT

The present disclosure discloses an electron microscope, which includes: a sample table configured to place a sample to be detected; an electron optical column configured to emit an electron beam, and converge the electron beam onto the sample to be detected; a high-voltage detection unit configured to receive signal electrons generated by the electron beam acting on the sample to be detected, and output a voltage signal; and a high-voltage power supply unit electrically connected to the high-voltage detection unit, and configured to control the high-voltage detection unit to reach a preset level. In the present disclosure, the high-voltage power supply unit supplies power to the high-voltage detection unit, and the high-voltage detection unit operates at the preset level, so that the speed of the signal electrons can be increased, and the energy of the signal electrons can be improved. Thus, more high-energy signal electrons are received by the high-voltage detection unit, so that the imaging speed and the imaging quality of the electron microscope can be improved.

FIG. 1