CLAIMS

1. A target assembly, comprising:

a first section comprising a first heat dissipating layer, wherein the first heat dissipating layer is provided with at least two first grooves, each of the at least two first grooves is provided with one first target, each of the at least two first targets is provided with one first action surface that is configured to be acted by an electron beam, each of the at least two first action surfaces is arranged to be inclined with respect to a bottom surface of a respective one of the at least two first grooves, and inclination angles of the at least two first action surfaces are different; and

a second section comprising a second heat dissipating layer, wherein the second heat dissipating layer is provided with a second groove, a second target is arranged in the second groove, the second target is provided with a second action surface that is configured to be acted by the electron beam, and the second action surface is arranged parallel to a bottom surface of the second groove.

2. The target assembly according to claim 1, wherein materials of the at least two first targets are different, and wherein the second heat dissipating layer is provided with at least two second grooves, at least two second targets are respectively arranged in the at least two second grooves, and materials of the at least two second targets are different.

3. An X-ray microscope, comprising the target assembly according to claim 1 or 2, wherein the X-ray microscope comprises a mounting seat provided with a clamping groove, the target assembly is detachably installed in the clamping groove, and the mounting seat is provided with a cooling assembly for cooling the target assembly.

4. The X-ray microscope according to claim 3, wherein the mounting seat comprises a first cooling side plate, a second cooling side plate, a cooling bottom plate and a cooling back plate;

the cooling assembly comprises a first cooling coil, a second cooling coil, a third cooling coil and a fourth cooling coil; and

an inner cavity of the first cooling side plate is provided with the first cooling coil, an inner cavity of the second cooling side plate is provided with the second cooling coil, an inner cavity of the cooling bottom plate is provided with the third cooling coil, and an inner cavity of the cooling back plate is provided with the fourth cooling coil.

5. The X-ray microscope according to claim 3, further comprising:

an electron optical column, configured to emit an electron beam, a lower end of the electron optical column being connected with a vacuum chamber provided with a vacuum window; and

a sample stage, configured to place a sample to be tested and arranged in the vacuum chamber,

wherein the target assembly is located in the vacuum chamber, the target assembly is acted by the electron beam to generate an X-ray, which irradiates the sample to be tested, passes through the vacuum window, and is received by an X-ray detector.

6. The X-ray microscope according to claim 5, further comprising a manipulator, configured to clamp the target assembly to move in the vacuum chamber.

7. The X-ray microscope according to claim 5, further comprising a bellows, wherein an end of the bellows is connected with the X-ray detector, and another end of the bellows is connected with an outer sidewall of the vacuum chamber around the vacuum window.

8. The X-ray microscope according to claim 7, wherein a sealed chamber is defined by the outer sidewall of the vacuum chamber, the bellows, the X-ray detector and the vacuum window, and the sealed chamber is filled with helium or nitrogen.