

ABSTRACT

There are provided a furnace door driving device and a semiconductor heat treatment apparatus. The furnace door driving device includes a connecting disk (1), a limiting assembly (2), a stop assembly (3), and a driving source (4); the driving source (4) is configured to drive the connecting disk (1) to rotate around an axis of the connecting disk (1); the connecting disk (1) is connected to a furnace door (02) for driving the furnace door (02) to rotate; the connecting disk (1) is provided with a limiting part (13) and a stop part (14); and the limiting assembly (2) is configured to be in limiting fit with the limiting part (13) when the connecting disk (1) rotates to a preset limit position, so as to stop the connecting disk (1) from rotating continuously in an original rotation direction; and the stop assembly (3) is configured to be in stop fit with the stop part (14) when the limiting assembly (2) is in limiting fit with the limiting part (13), so as to prevent the connecting disk (1) from rotating in a direction opposite to the original rotation direction. Thus, reverse rotation of the furnace door (02) is prevented, and severe vibration of the connecting disk (1) caused by repeated limiting fit between the connecting disk (1) and the limiting assembly (2) is avoided, thereby avoiding damage to the furnace door (02) caused by excessive vibration of the furnace door (02).