

## ABSTRACT

A short circuit detection circuit and a short circuit detection method for a multi-phase rectifier are provided, which are used for detecting conditions of a spectrum of a FWR signal outputted from the multi-phase rectifier in the frequency domain. Next, determining whether the detected signal indicating the amplitude of the frequency of the AC signal is greater than or equal to the reference signal, so as to determine whether the multi-phase rectifier has a short circuit condition. Therefore, the short circuit detection circuit and the short circuit detection method do not have any requirements for configuring a short circuit detection element on each current path of the multi-phase rectifier, so that the power loss and the cost can be reduced effectively.