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(54) **ELECTRONIC CIRCUIT BREAKER  
CONFIGURED TO PROVIDE A FAIL-SAFE  
MODE**  
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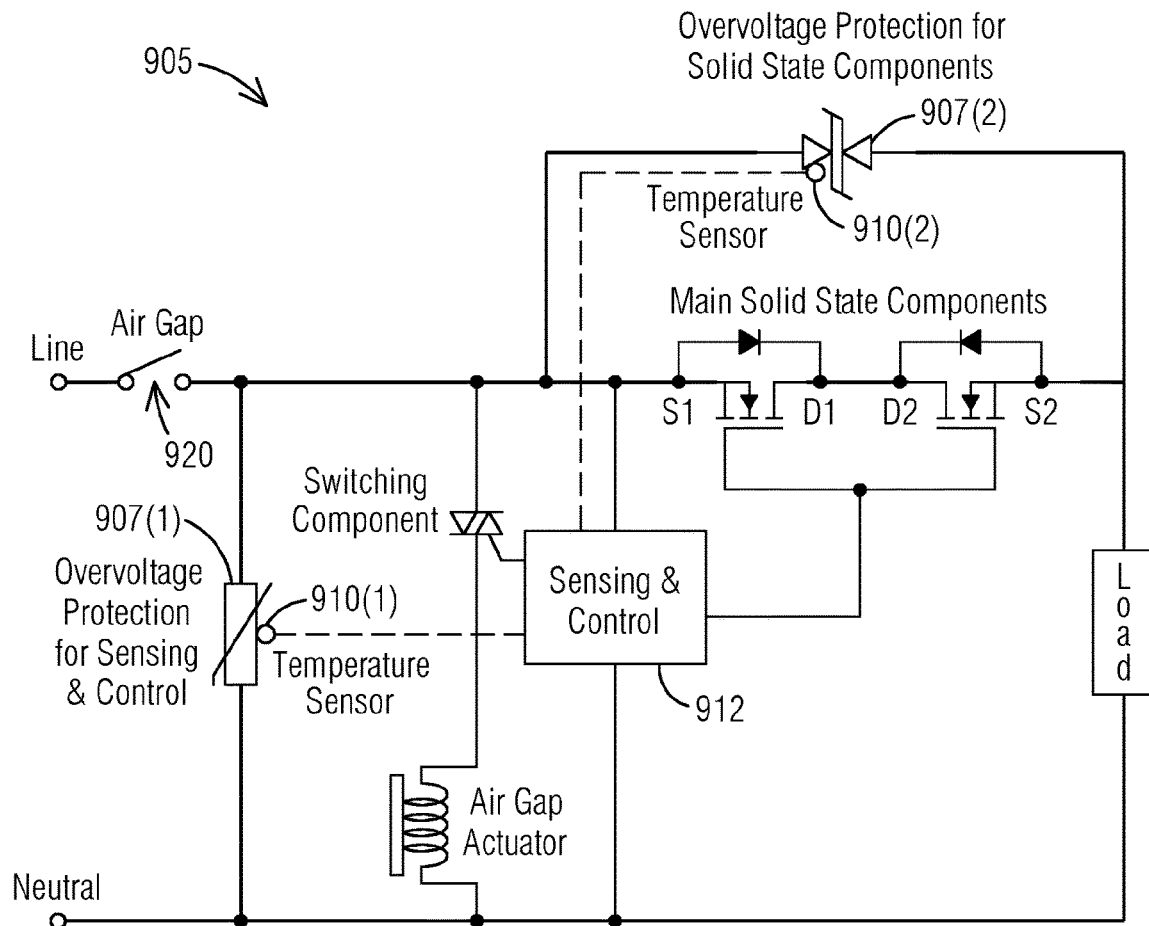
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**ABSTRACT**

An electronic circuit breaker is configured to provide a fail-safe mode. It comprises at least one overvoltage component, a temperature sensor attached to the at least one overvoltage component and a sensing and control circuit configured to monitor temperatures of the at least one overvoltage component. There are two criteria to decide if the electronic circuit breaker should open, when either criterion is met. The first criteria is if monitored temperatures exceed max safe temperature at any time and the second criteria is if the monitored temperatures increase at two different time moments during start up.



The method monitors temperature at different times to ensure  
it is the current leakage, not previous energy absorption