

ESTIMATION OF LIFETIME REMAINING FOR A CONSUMABLE-PART IN A SEMICONDUCTOR MANUFACTURING CHAMBER

ABSTRACT

A consumable part, for use inside a chamber where plasma is used to process a semiconductor substrate, includes a body and a trigger feature. The body has a surface configured to be exposed to the plasma during processing in the chamber, and the trigger feature is integrated within the body. The trigger feature includes a void disposed under the surface of the body, where the void is configured to become visible when the surface is eroded from exposure to the plasma over time. The void becoming visible is an identifiable feature on the surface of the body that indicates a wear level for the consumable part, the wear level being associated with an amount of processing time remaining for the consumable part.

FIG. 1A