

Title (en)  
PLASMA REACTOR FOR MANUFACTURING ELECTRONIC COMPONENTS

Title (de)  
PLASMAREAKTOR ZUR HERSTELLUNG ELEKTRONISCHER KOMPONENTEN

Title (fr)  
REACTEUR A PLASMA CONCU POUR LA PRODUCTION DE COMPOSANTS ELECTRONIQUES

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Application  
**EP 02746173 A 20020705**

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Abstract (en)  
[origin: WO03007358A1] Disclosed is a plasma reactor for etching the material, such as a semiconductor wafer, which is to solve the problem of unbalance of plasma ion density between a wafer's central part and its edge part. A plurality of coils in the present invention, each having a different polarity and being connected to the adjacent coil in series, form active electron layer that oscillate around the wafer edge with the very fast speed. And, the modified structure of gas injector enables mixed gas to spread fast. Therefore, this invention has advantages that the problem of unbalance of the wafer etching rate and plasma ion density between the wafer's central and edge part can be solved. Also, a magnetic coil array according to the present invention which can be run by AC or single power driver such as pulse signal. Therefore, a driver circuit becomes very simple.

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