

PLASMA ASSISTED DEPOSITION APPARATUS AND METHOD OF FORMING THE SAME**Abstract**

Various embodiments may relate to a plasma assisted deposition apparatus. The plasma assisted deposition apparatus may include a chamber. The chamber may include a radio frequency (RF) electrode configured to generate plasma. The chamber may also include a stage for holding a substrate. The chamber may further include a shadow-plate between the electrode and the stage. The plasma assisted deposition apparatus may additionally include a vacuum system configured to generate a vacuum in the chamber. The plasma assisted deposition apparatus may also include one or more gas inlets configured to introduce one or more gases into the chamber. The radio frequency (RF) electrode may be a mesh including a plurality of elongate members. The shadow-plate may be a further mesh including a plurality of further elongate members aligned with the plurality of elongate members of the radio frequency (RF) electrode.

FIG. 5A