ABSTRACT OF THE DISCLOSURE

In some implementations described herein, a collimator that is biasable is provided. The ability to bias the collimator allows control of the electric field through which the sputter species pass. In some implementations of the present disclosure a collimator that has a high effective aspect ratio while maintaining a low aspect ratio along the periphery of the collimator of the hexagonal array of the collimator is provided. In some implementations, a collimator with a steep entry edge in the hexagonal array is provided. It has been found that use of a steep entry edge in the collimator reduces deposition overhang and clogging of the cells of the hexagonal array. These various features lead to improve film uniformity and extend the life of the collimator and process kit.

[Fig.1]