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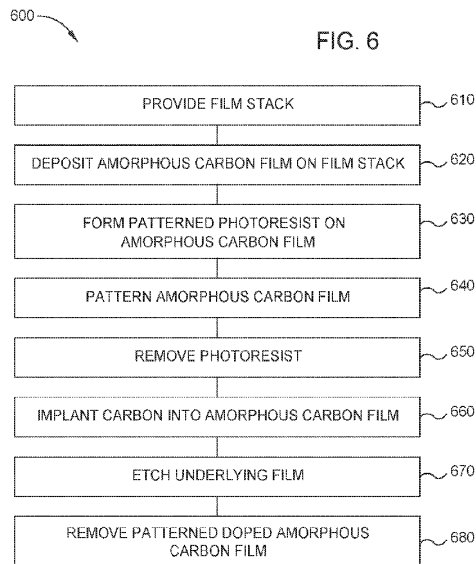
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(54) Title: HIGHLY ETCH SELECTIVE AMORPHOUS CARBON FILM



(57) Abstract: Methods and techniques for deposition of amor-
phous carbon films on a substrate are provided. In one example, the
method includes depositing an amorphous carbon film on an un-
derlayer positioned on a susceptor in a first processing region. The
method further includes implanting a dopant or the inert species
into the amorphous carbon film in a second processing region. The
implant species, energy, dose & temperature in some combination
may be used to enhance the hardmask hardness. The method fur-
ther includes patterning the doped amorphous carbon film. The
method further includes etching the underlayer.

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