

ABSTRACT

METHOD OF FORMING AN IN-SITU RECESSED STRUCTURE

The present invention features a method of patterning a substrate that includes forming, on the substrate, a multi-layer film with a surface, an etch rate interface and an etch-differential interface. The etch-differential interface is defined between the etch rate interface and the surface. A recorded pattern is transferred onto the substrate defined, in part, by the etch-differential interface. The recorded pattern has etched pattern characteristics (EPC) that define the shape of the pattern formed for a given etch process or set of etch processes. The etch-differential interface modifies the EPC. By establishing a suitable etch-differential interface, one may obtain a recorded pattern that differs substantially in shape compared with the shape of the patterned layer or the same pattern may be obtained.

Figure 1