

ABSTRACT OF THE DISCLOSURE

An integrated circuit semiconductor device includes a plurality of cylindrical structures separated from each other on a substrate; and a plurality of supporters having an opening region exposing side surfaces of the plurality of cylindrical structures, the plurality of supporters being in contact with the side surfaces of the plurality of cylindrical structures and supporting the plurality of cylindrical structures, wherein each of the plurality of supporters has both side surfaces having slopes and has a top width that is less than a bottom width.

FIG. 2A