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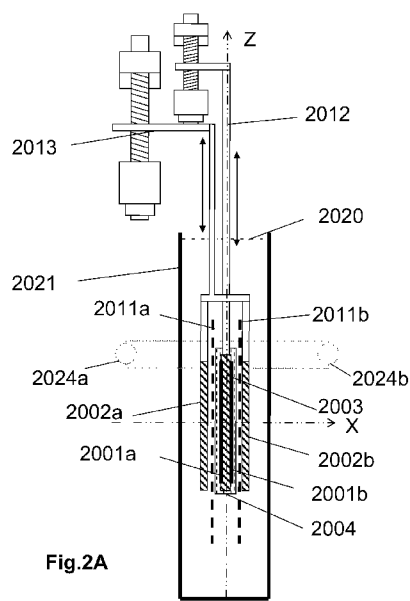
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(54) Title: METHOD AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATE



(57) Abstract: The present invention relates to applying at least one
ultra/mega sonic device and its reflection plate for forming standing wave in a
metallization apparatus to achieve highly uniform metallic film deposition at
a rate far greater than conventional film growth rate in electrolyte. In the
present invention, the substrate is dynamically controlled so that the position
of the substrate passing through the entire acoustic field with different power
intensity in each motion cycle. This method guarantees each location of the
substrate to receive the same amount of total sonic energy dose over the inter-
val of the process time, and to accumulatively grow a uniform deposition
thickness at a rapid rate.