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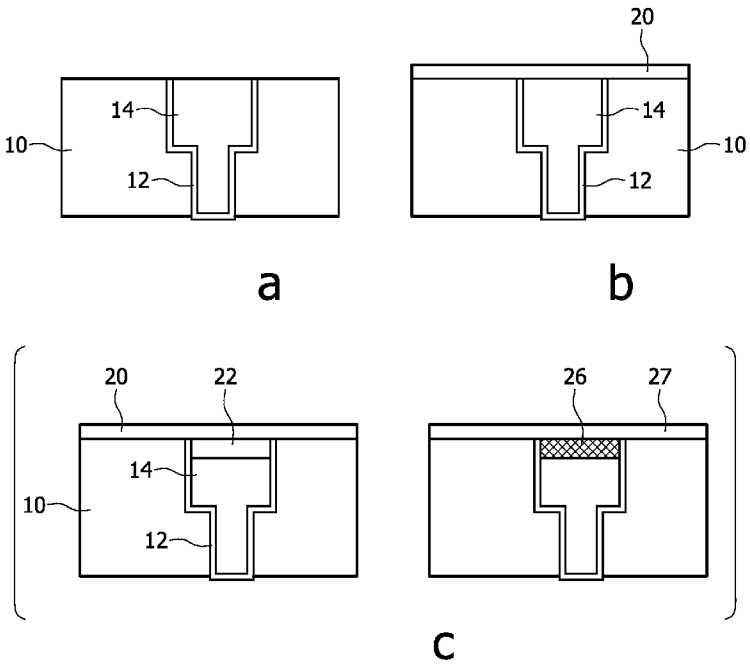
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(54) Title: METHOD OF FORMING A SELF ALIGNED COPPER CAPPING LAYER



(57) Abstract: A method of forming a capping layer on a copper interconnect line (14). The method comprises providing a layer (20) of Aluminium over the interconnect line (14) and the dielectric layer (10) in which it is embedded. This may be achieved by deposition or chemical exposure. The structure is then subjected to a process, such as annealing or further chemical exposure, in an environment containing, for example, Nitrogen atoms, so as to cause indiffusion of Al into the copper line (14) and nitridation to form a diffusion barrier 26 of the intermetallic compound CuAlN.

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