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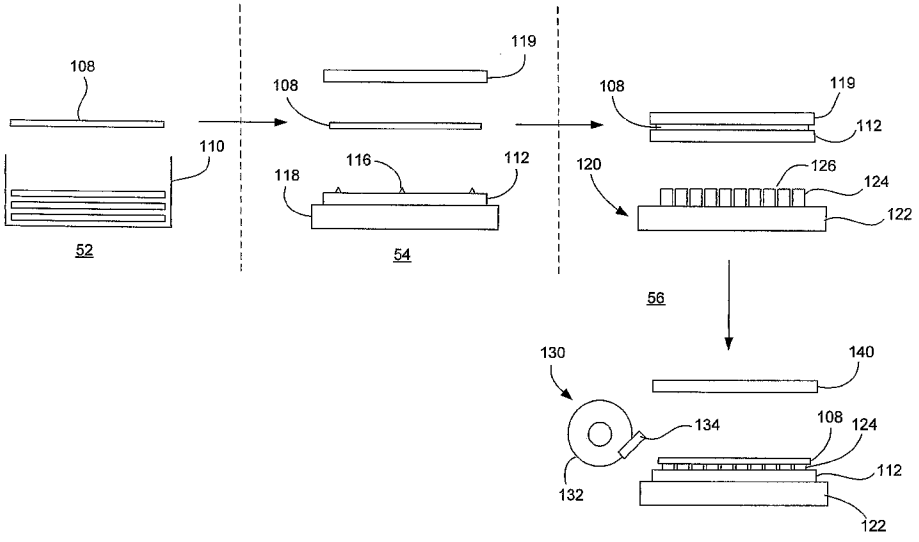
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(54) Title: SAW SINGULATION



(57) Abstract: Improved systems and methods for singulating a substrate into a plurality of integrated circuit devices are disclosed. One aspect of the invention corresponds to a fixture that holds the substrate during the dicing process. Another aspect of the invention pertains to a nozzle assembly that provides better fluid flow over the cutting blades. Another aspect of the invention corresponds to a nozzle adjustment assembly that helps position the nozzles relative to the blades. Another aspect of the invention corresponds to spacers that reduce the problem of imbalance caused by fluid retained therein. Yet another aspect pertains to the composition of the fluid, which is distributed by the nozzle assembly to the blades.

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