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(54) Title: HEAT ACTUATED AND PROJECTED LITHOGRAPHY SYSTEMS AND METHODS

(57) Abstract: In accordance with an embodiment of the disclosure, a method of patterning can include dividing an image into a set of frame sections; determining a tip pattern for a respective portion of an image to be patterned by each tip of the tip array in each frame section of the set of frame sections; disposing the tip array in a patterning position in a first location of the substrate corresponding to a location of the substrate in which the first frame section in the set of frame sections is to be patterned; projecting a first pattern of radiation onto the tip array to selectively irradiate one or more tips of the tip array and pattern the substrate, wherein the first pattern of radiation corresponds to a tip pattern for the first frame section; disposing the tip array in a patterning position in a second location of the substrate corresponding to a location of the substrate in which the second frame section in the set of frame sections is to be patterned; projecting a second pattern of radiation onto the tip array to selectively irradiate tips of the tip array and pattern the substrate, wherein the second pattern of radiation corresponds to a tip pattern for the second frame section; and repeating the disposing and projecting for each frame section in the set of frame sections to pattern the image.



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