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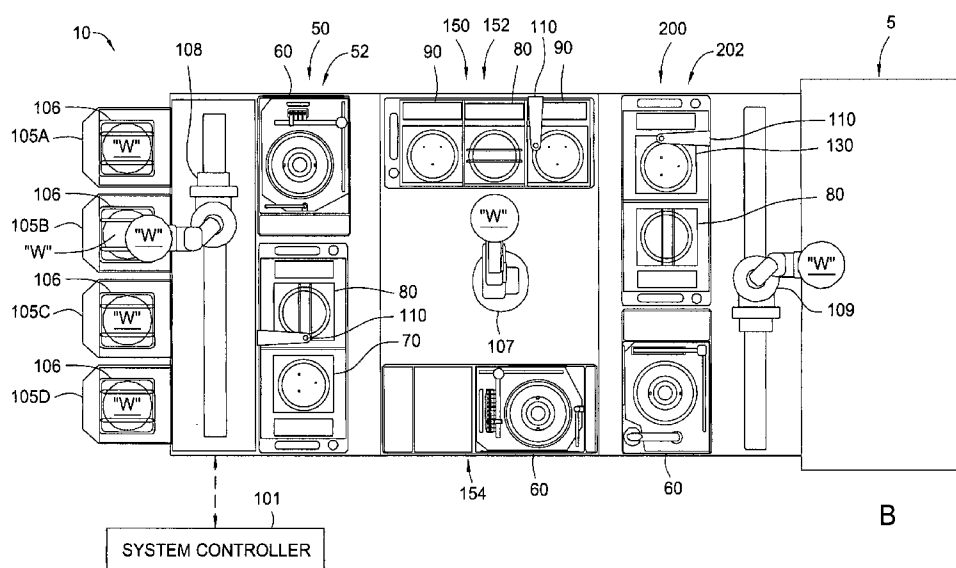
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[Continued on next page]

(54) Title: CLUSTER TOOL ARCHITECTURE FOR PROCESSING A SUBSTRATE



(57) Abstract: Embodiments generally provide an apparatus and method for processing substrates using a multi-chamber processing system (e.g., a cluster tool) that has an increased throughput, increased reliability, substrates processed in the cluster tool have a more repeatable wafer history, and also has a smaller system footprint. In one embodiment of the cluster tool, the cost of ownership is reduced by grouping substrates together and transferring and processing the substrates in groups of two or more to improve system throughput, and reduces the number of moves a robot has to make to transfer a batch of substrates between the processing chambers, thus reducing wear on the robot and increasing system reliability. Embodiments also provide for a method and apparatus that are used to increase the reliability of the substrate transfer process to reduce system down time.



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