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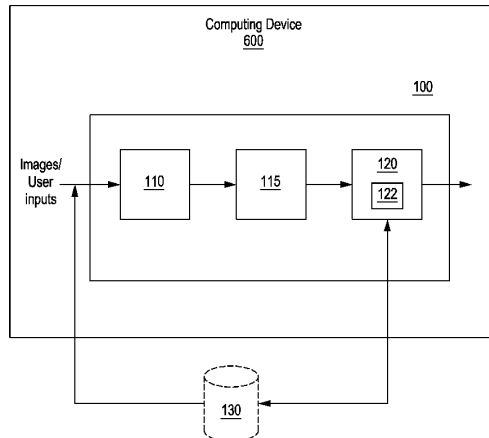


FIGURE 1

(57) **Abstract:** A method, apparatus and system for the automatic detection and measurement of chipping defects on diced wafers includes receiving an image of at least a portion of a diced wafer, aligning the received image of the at least the portion of the diced wafer, determining edges of the at least the portion of the diced wafer depicted in the aligned, received image, automatically determining at least one baseline from which to measure chipping defects on the at least the portion of the diced wafer from the determined edges, and measuring chipping defects on the at least the portion of the diced wafer using at least one determined, respective baseline. In some embodiments, the method, apparatus and system can further include applying a machine learning model to measured chipping defects to determine if a critical failure exists on the diced wafer.

[Continued on next page]

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