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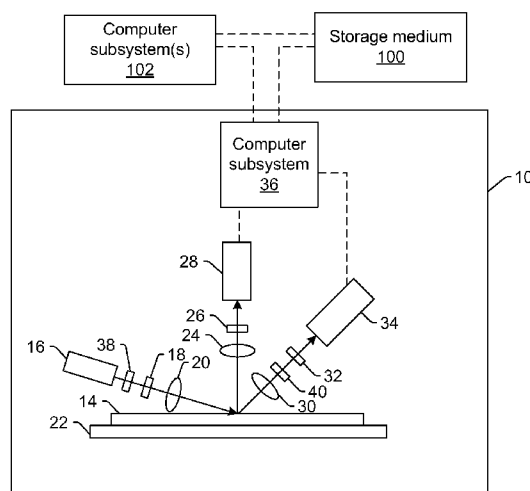
(54) **Title:** VIRTUAL INSPECTION SYSTEMS FOR PROCESS WINDOW CHARACTERIZATION

Fig. 1

(57) **Abstract:** Methods and systems for detecting defects on a specimen are provided. One system includes a storage medium configured for storing images for a physical version of a specimen generated by an inspection system. At least two dies are formed on the specimen with different values of one or more parameters of a fabrication process performed on the specimen. The system also includes computer subsystem(s) configured for comparing portions of the stored images generated at locations on the specimen at which patterns having the same as-designed characteristics are formed with at least two of the different values. The portions of the stored images that are compared are not constrained by locations of the dies on the specimen, locations of the patterns within the dies, or locations of the patterns on the specimen. The computer subsystem(s) are also configured for detecting defects at the locations based on results of the comparing.



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