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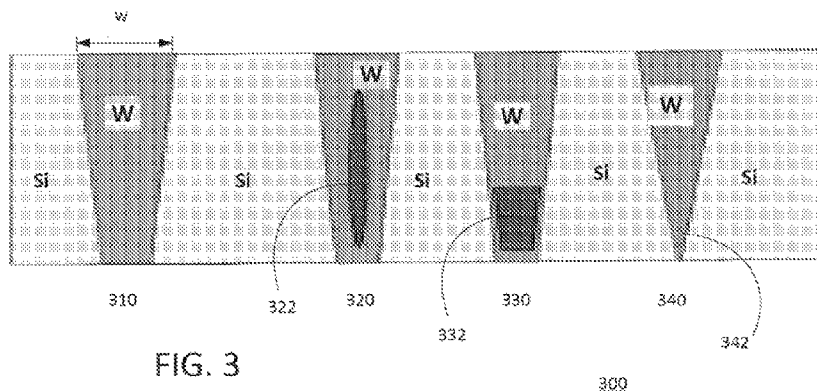


FIG. 3

(57) **Abstract:** One embodiment relates to a method of detecting a buried defect in a target microscopic metal feature. An imaging apparatus is configured to impinge charged particles with a landing energy such that the charged particles, on average, reach a depth within the target microscopic metal feature. In addition, the imaging apparatus is configured to filter out secondary electrons and detect backscattered electrons. The imaging apparatus is then operated to collect the backscattered electrons emitted from the target microscopic metal feature due to impingement of the charged particles. A backscattered electron (BSE) image of the target microscopic metal feature is compared with the BSE image of a reference microscopic metal feature to detect and classify the buried defect. Other embodiments, aspects and features are also disclosed.