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(54) Title: SURFACE INSPECTION SYSTEM AND METHOD OF INSPECTING SURFACE OF WORKPIECE

(57) Abstract

A surface inspection system (20) and methods of inspecting a surface of a workpiece are provided for detecting particles, defects, or other surface characteristics in or on a surface of the workpiece. The surface inspection system (20) preferably has a transporter (40) arranged for transporting a workpiece along a material path and a rotator (45) associated with the transporter and arranged for rotating a workpiece during translational travel along the material path. A scanner (80) is positioned and arranged for scanning a surface of a workpiece during rotational and translational travel along the material path. The scanner preferably includes a light source (81) arranged to generate a light beam therefrom and a deflector (85) positioned to receive the light beam and arranged for deflecting the light beam along a predetermined scan path across a surface of the workpiece as the workpiece rotationally and translationally travels along the material path. A collector (100) also is preferably arranged for collecting light specularly reflected and scattered from the surface of the workpiece during rotational and translational travel along the material path.

