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(71) Applicant: **BLUE PHOTON TECHNOLOGY & WORKHOLDING SYSTEMS LLC** [US/US]; 1002 Industrial Park Drive, Shelby, MI 49455 (US).

(72) Inventor: **BILLINGS, Danial**; 2454 Whitetail Drive, Rothbury, MI 49452 (US).

(74) Agent: **WATHEN, Douglas L.** et al.; Dinsmore & Shohl LLP, 900 Wilshire Drive, Suite 300, Troy, MI 48084 (US).

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(54) Title: METHOD AND SYSTEM TO TEMPORARILY HOLD A WORKPIECE DURING MANUFACTURING USING ADHESIVE ATTACHMENT

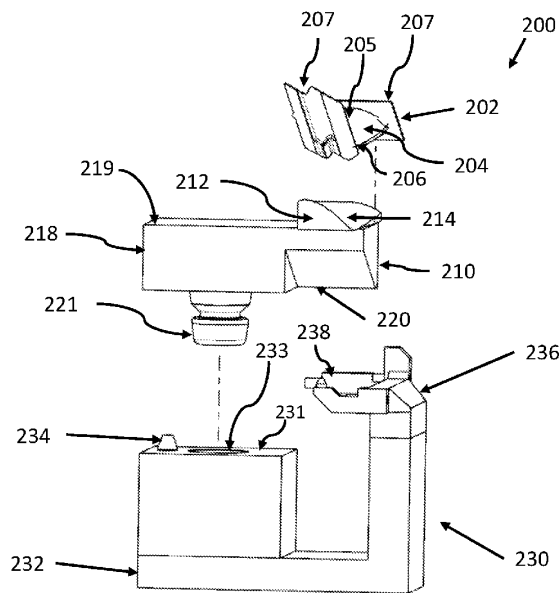


FIG. 7

(57) Abstract: A method and system temporarily holds a workpiece, most suitably an aero engine turbine blade element during manufacture. The workholding system includes a support body with a contoured body surface, complementary to a workpiece surface, formed of a transparent material to define a bonding zone. The support body is supported by a base to form a workpiece shuttle, and a bond station receives the workpiece shuttle. Complementary zero-point locating elements on the shuttle and station assure accurate positioning. The bond station further has workpiece locating elements configured to accurately position the workpiece on the shuttle in a predetermined position relative to the zero-point locating elements of the shuttle, thereby compensating for shuttle-to-shuttle variance. An adhesive, such as a UV curable adhesive, is applied to the bonding zone and cured by UV through the transparent material, thereby fixing the workpiece in the predetermined position.

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