

TOOLING ASSEMBLY AND METHOD FOR ALIGNING COMPONENTS FOR A POWDER BED ADDITIVE MANUFACTURING REPAIR PROCESS

ABSTRACT

A tooling assembly (200) and method (300) of aligning a plurality of components (70) for a repair process in an additive manufacturing machine (100) includes positioning the plurality of components (70) such that a repair surface (72) of each of the plurality of components (70) contacts an alignment plate (202), e.g., under the force of gravity or using biasing members (262). The method (300) further includes surrounding the alignment plate (202) with containment walls (220) to define a reservoir (222) around the plurality of components (70) and dispensing a fill material (212), such as wax or a potting material, into the reservoir (222) which is configured for fixing a relative position of the plurality of components (70) when the fill material (212) is solidified.

[Fig.8]