

FLEXIBLE ELECTROMAGNETIC SURFACE REWORK SYSTEM AND METHOD

ABSTRACT

A method of reworking at least a portion of a complex surface geometry component includes applying a polarized abrasive media to a blemish on a complex surface geometry component; attaching a flexible electromagnetic polishing head to the complex surface geometry component adjacent to the polarized abrasive media; and generating an electromagnetic field with the flexible electromagnetic polishing head to affect the polarized abrasive media and thereby polish the workpiece to at least partially reduce the blemish. An electromagnetic rework system includes a polarized abrasive media including at least one component capable of being affected by an electromagnetic field; and a flexible electromagnetic polishing head operable to affect the polarized abrasive media.

Fig. 1