

METHODS FOR REPAIRING COMPOSITE MATERIAL USING PRE-CURED PLUGS

ABSTRACT

A method for repairing a composite structure using pre-cured plugs. In accordance with one method, composite material is removed from a first composite laminate to form a cavity bounded by a tapered internal surface that extends from an opening at an outer mold line surface of the first composite laminate. In addition, a second composite laminate is machined to form a plug having a tapered surface. Then the plug is placed so that the tapered surface of the plug opposes the tapered internal surface of the first composite laminate. Thereafter, the tapered surface of the plug is bonded to the tapered internal surface of the first composite laminate. Optionally, a hole is drilled in the plug for receiving a fastener.

Fig. 9