

LOCKING HOLE PLUG FOR SEALING HOLES IN COMPOSITE STRUCTURES

ABSTRACT

A hole plug that can be used during rework or repair of a composite fiber assembly includes various features that allow placement of a vacuum force to the surface being reworked or repaired. In some implementations, the hole plug can include a plurality of nubs positioned around a shank. The nubs can secure the hole plug to the composite fiber assembly until a cure of an adhesive. The hole plug can further include a plurality of longitudinally oriented grooves extending along the shank and positioned between the plurality of nubs, and can include a notch positioned circumferentially around the shank. The grooves and notch can be used as adhesive carriers that assist with dispersal of a sufficient volume of the adhesive onto other portions of the shank and the composite fiber assembly during insertion of the hole plug into a hole in the composite fiber assembly.

FIG. 1