

ABSTRACT

PRINT ON DEMAND HEAT BLANKET SYSTEM

A method including receiving a model of a composite structure having an inconsistency. The model includes a pre-calculated heating model that specifies areas of the inconsistency for which corresponding different amounts of heating are applied to an uncured composite material that is applied to the inconsistency. A design for heating elements (114 and 116) of varying density across the areas is generated from the model. The design is configured to cause the heating elements (114) in a first sub-area of a heat blanket system to generate a first amount of heat in a third area in the areas, and to cause the heating elements (116) in a second sub-area of the heat blanket system to generate a second, different amount of heat in a fourth area of the areas. The heating elements (114 and 116) are printed according to the design on a blanket to manufacture the heat blanket system.

Fig. 2