THREE-DIMENSIONAL DEEP MOLDED STRUCTURES WITH ENHANCED PROPERTIES

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ABSTRACT
A three-dimensional deep molded structure made from planar knits or wovens composed of homo-component, bicomponent or multi-component fibers having a fiber diameter of less than 100 microns and nonwovens composed of fibers or filaments of any size. Most suitably, nonwovens with a random fiber orientation distribution and a high degree of crimp with partially oriented fibers are preferred for use in forming the deep molded structure.

35 Claims, 9 Drawing Sheets