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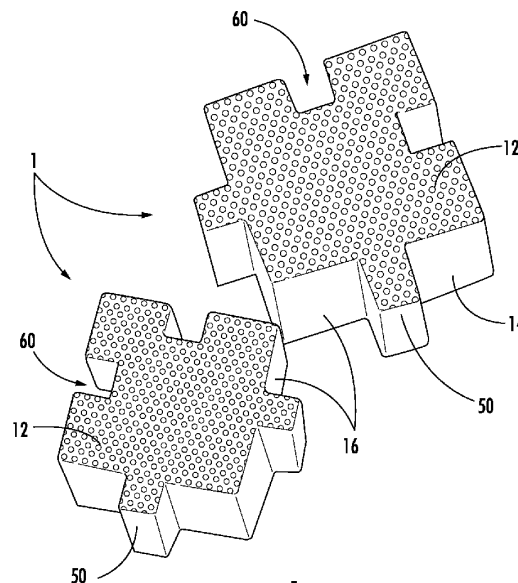


FIG. 1

(57) Abstract: Interlocking porous hydrogel blocks (IPHB), which are suitable for variety of cell and/or tissue growth, are provided. The IPHBs have a three-dimensional (3D) macrostructure defined by a continuous polymeric matrix material and a network of microporous channels and/or chambers extending throughout the continuous polymeric matrix material. The 3D macrostructure comprises a top surface, a bottom surface, and a thickness defined by at least one side edge extending from the top surface to the bottom surface. The 3D macrostructure structure includes at least one interlocking-male component and at least one interlocking-female component.

[Continued on next page]

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