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(54) Title: METHODS OF AND APPARATUS FOR MAKING A FLEXIBLE COMPOSITE HAVING RESERVOIRS AND CAPILLARIES

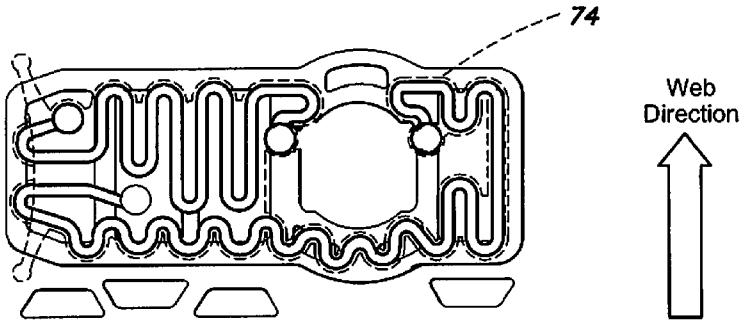


FIG. 1C

(57) Abstract: A method of manufacturing a flexible composite panel having a plurality of reservoirs connected by at least one capillary includes forming a capillary assembly by winding a flexible, deformable capillary base web partially around a rotating cylinder that has a plurality of recessed features formed therein; drawing the capillary base web into the recessed features to form the capillaries in the capillary base web; filling the capillaries; and laminating a capillary barrier web over the capillary base web. A flexible reservoir assembly is formed by cutting the perimeter of the at least two reservoirs and associated catchments into a flexible reservoir web; removing the waste cut interiors of the reservoirs and the catchments from the reservoir web; securing the reservoir web to a base layer; overfilling each reservoir; and laminating the capillary assembly over the reservoir assembly, driving excess filler from the reservoirs into the catchments.

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