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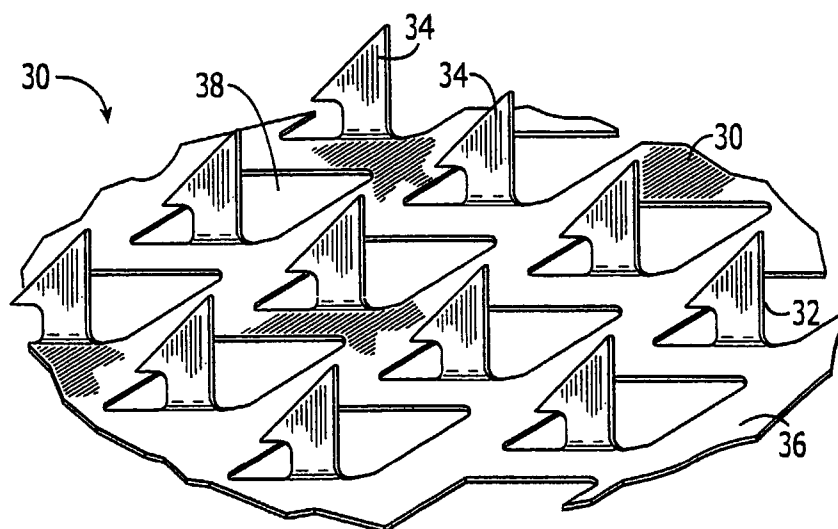
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(54) Title: ULTRASOUND ASSISTED TRANSDERMAL VACCINE DELIVERY METHOD AND SYSTEM



(57) Abstract: An apparatus and method for transdermally delivering a vaccine comprising a delivery system having (i) a microprojection member (30) (or system) that includes a plurality of microprojections (32) (or array thereof) that are adapted to pierce through the stratum corneum into the underlying epidermis layer, or epidermis and dermis layers and (ii) an ultrasonic device. In one embodiment, the vaccine is contained in a biocompatible coating (35) that is applied to the microprojection member. In a further embodiment, the delivery system includes a gel pack having a vaccine-containing hydrogel formulation that is disposed on the

microprojection member after application to the skin of a patient. In an alternative embodiment, the vaccine is contained in both the coating and the hydrogel formulation.