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(54) Title: MICRONEEDLE ASSEMBLY

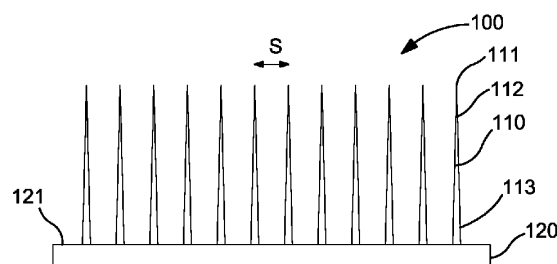


FIG. 1

(57) Abstract: A microneedle assembly that is capable of transdermal delivery of a drug compound, such as a vaccine, (e.g., vaccine) across a dermal barrier of a subject (e.g., human), and/or detecting the presence of an analyte in the subject is provided. The microneedle assembly comprises a plurality of microneedles arranged on a support that each contain a tip and base, one or both of which are formed from a polymer composition that includes a liquid crystalline polymer. By selectively controlling the specific components of the polymer composition, as well as their relative concentration, the resulting microneedles may exhibit a high degree of physical alignment, which can help ensure better performance during use of the microneedle assembly.



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