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(54) Title: TISSUE CARE DEVICES INCLUDING MICROSTRUCTURES

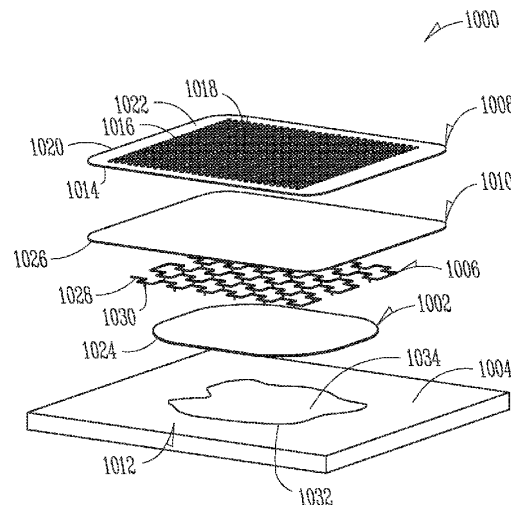


Fig. 11

(57) Abstract: A wound cover device can comprise a backing, a micro-structure device, and one or more of a wound dressing and a skin replacement layer. The backing can be stretchable. The micro-structure device can comprise a plurality of fasteners, such as micro-staples, micro-pins, micro-barbs and the like, that can be used to attach the wound cover device to tissue such as skin. The micro-structure device can be stretchable to stretch with the backing. The micro-structure device can be configured such that the fasteners are positioned in a two-dimensional pattern or fill-in an interior portion of the wound dressing or skin replacement layer. The fasteners of the micro-structure device can extend through the wound dressing or skin replacement layer. The micro-structure device can additionally be placed around a perimeter or edge region of the backing.

[Continued on next page]

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