

100

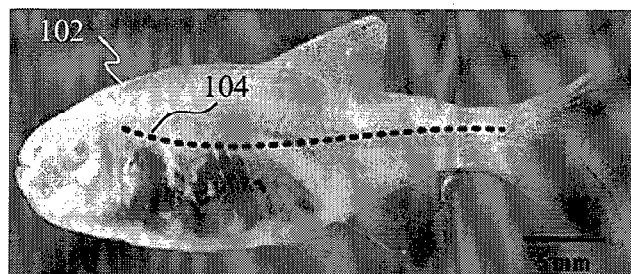


FIG. 1A

110



FIG. 1B

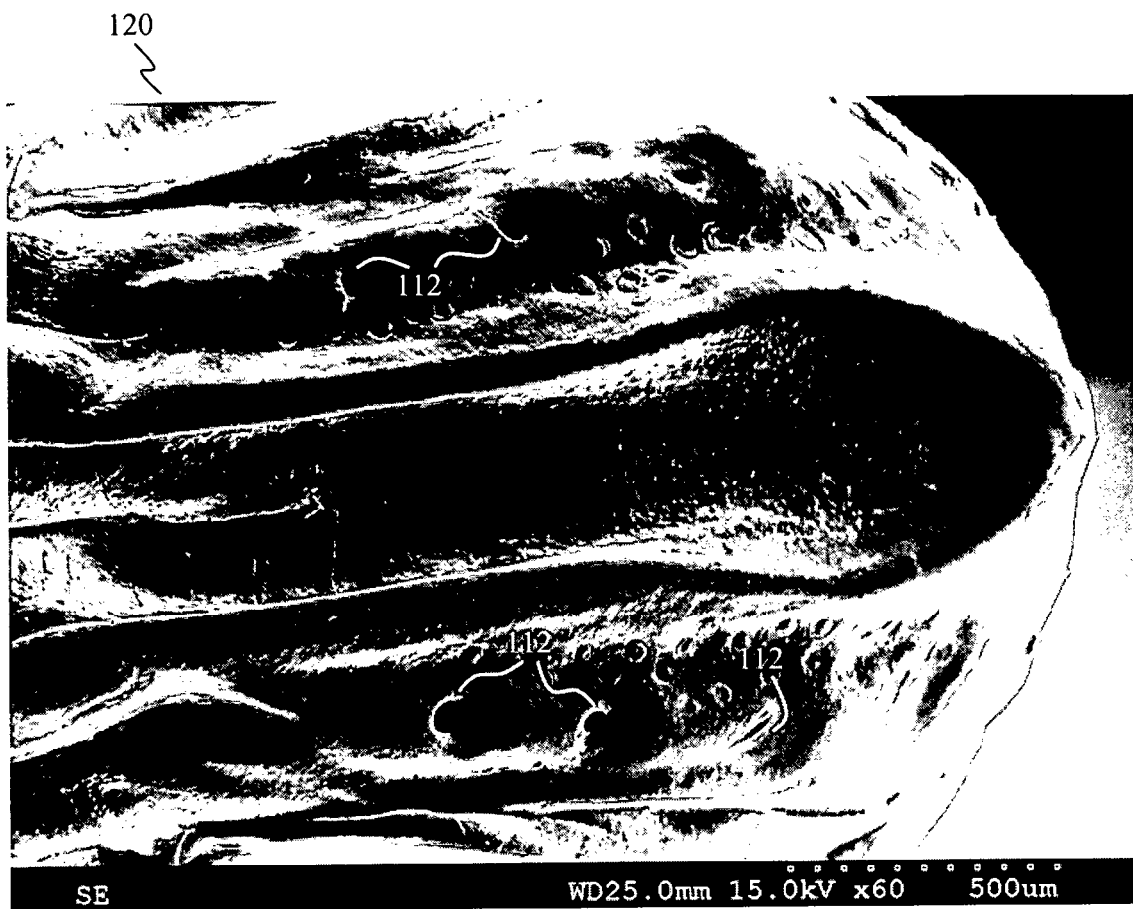


FIG. 1C

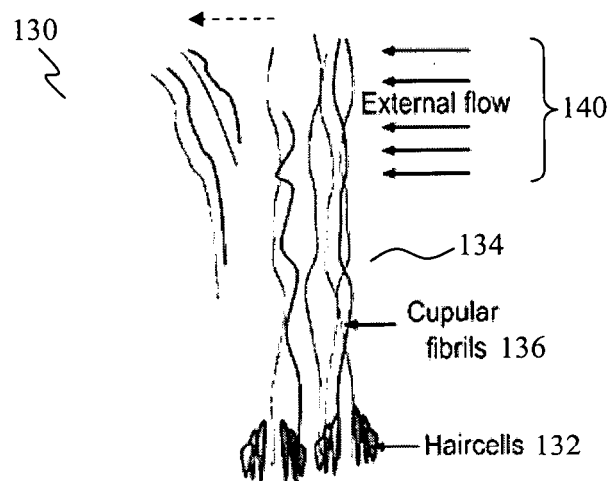


FIG. 1D

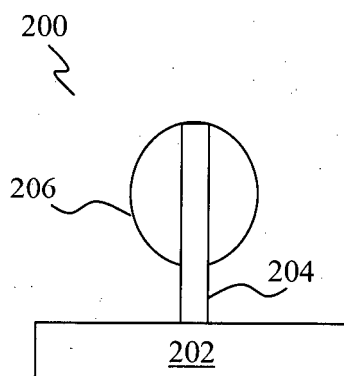


FIG. 2A

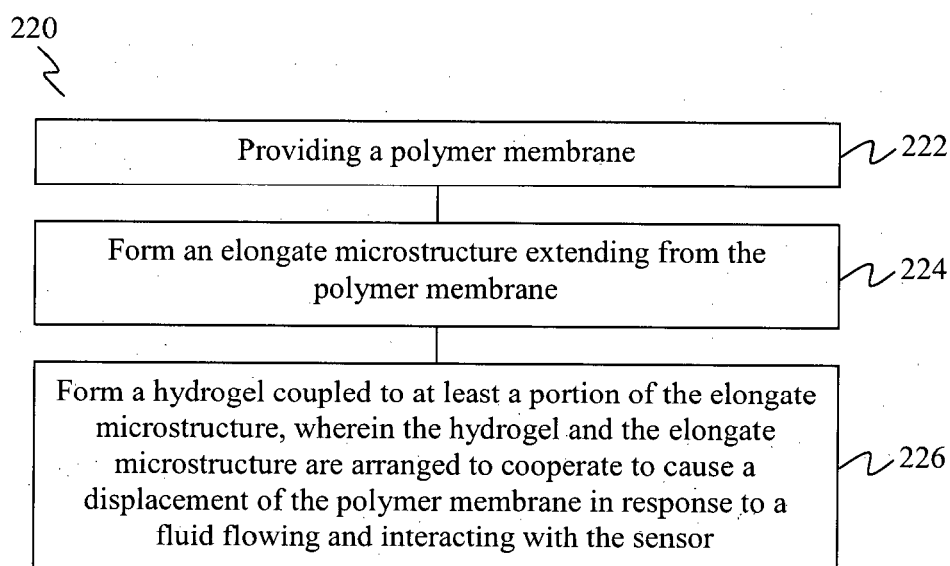


FIG. 2B

240

Position a sensor in a flowing fluid, wherein an elongate microstructure extending from a polymer membrane of the sensor and a hydrogel coupled to at least a portion of the elongate microstructure cooperate to cause a displacement of the polymer membrane in response to the flowing fluid interacting with the sensor

242

Provide a measurement indicative of a flow parameter of the flowing fluid based on the displacement of the polymer membrane

244

FIG. 2C

300

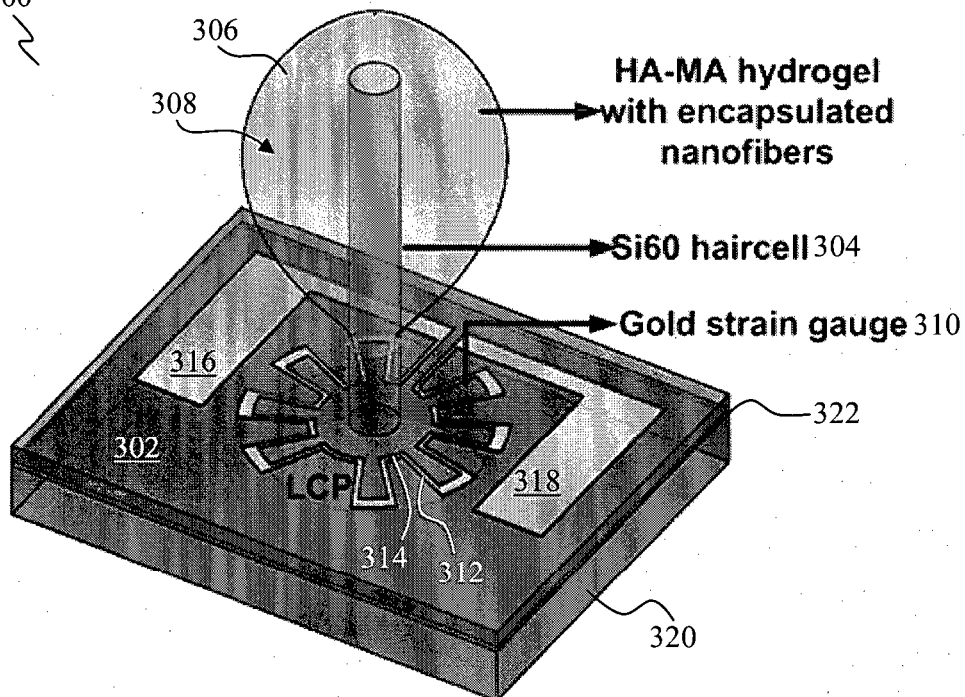


FIG. 3A

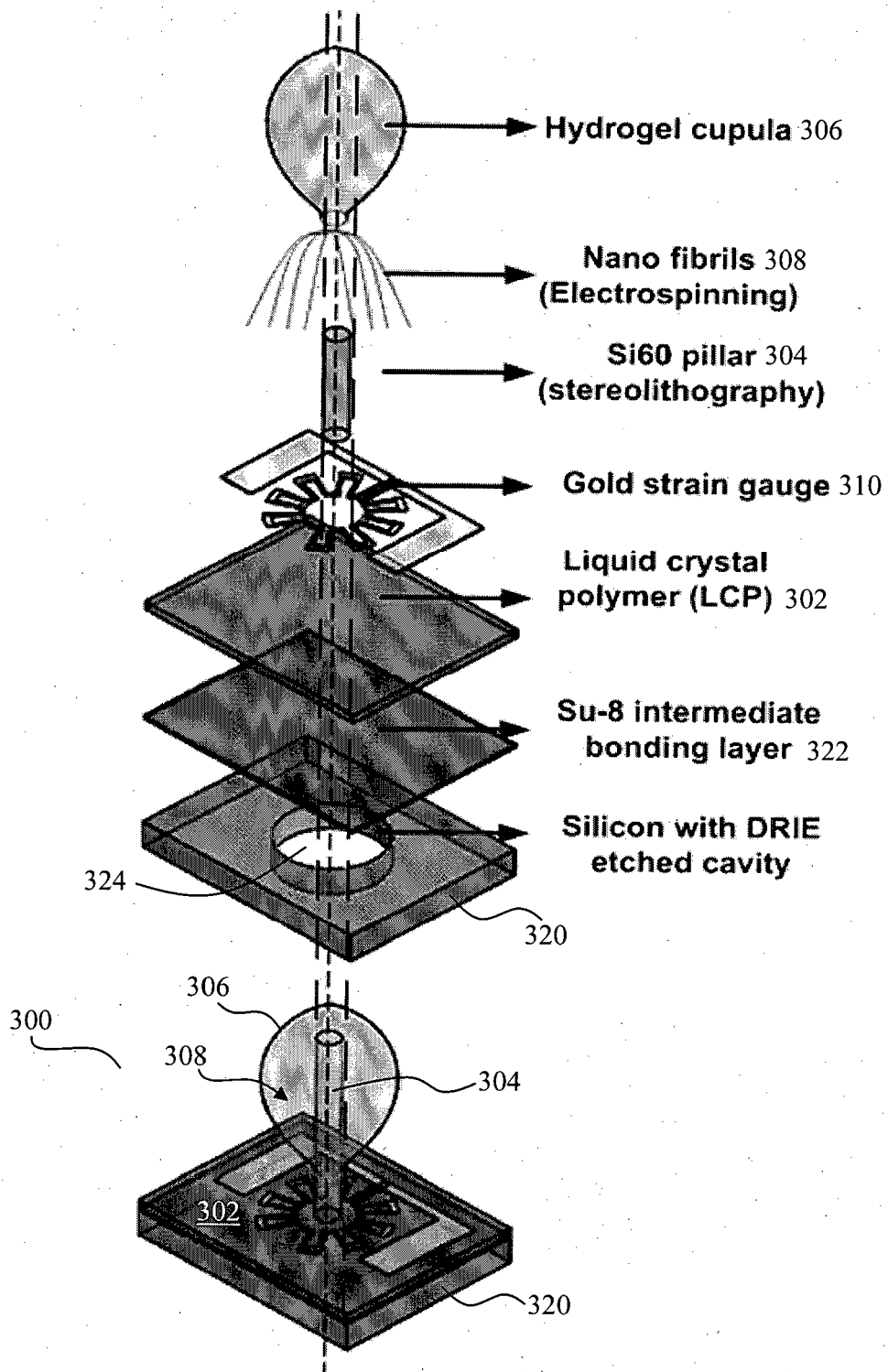


FIG. 3B

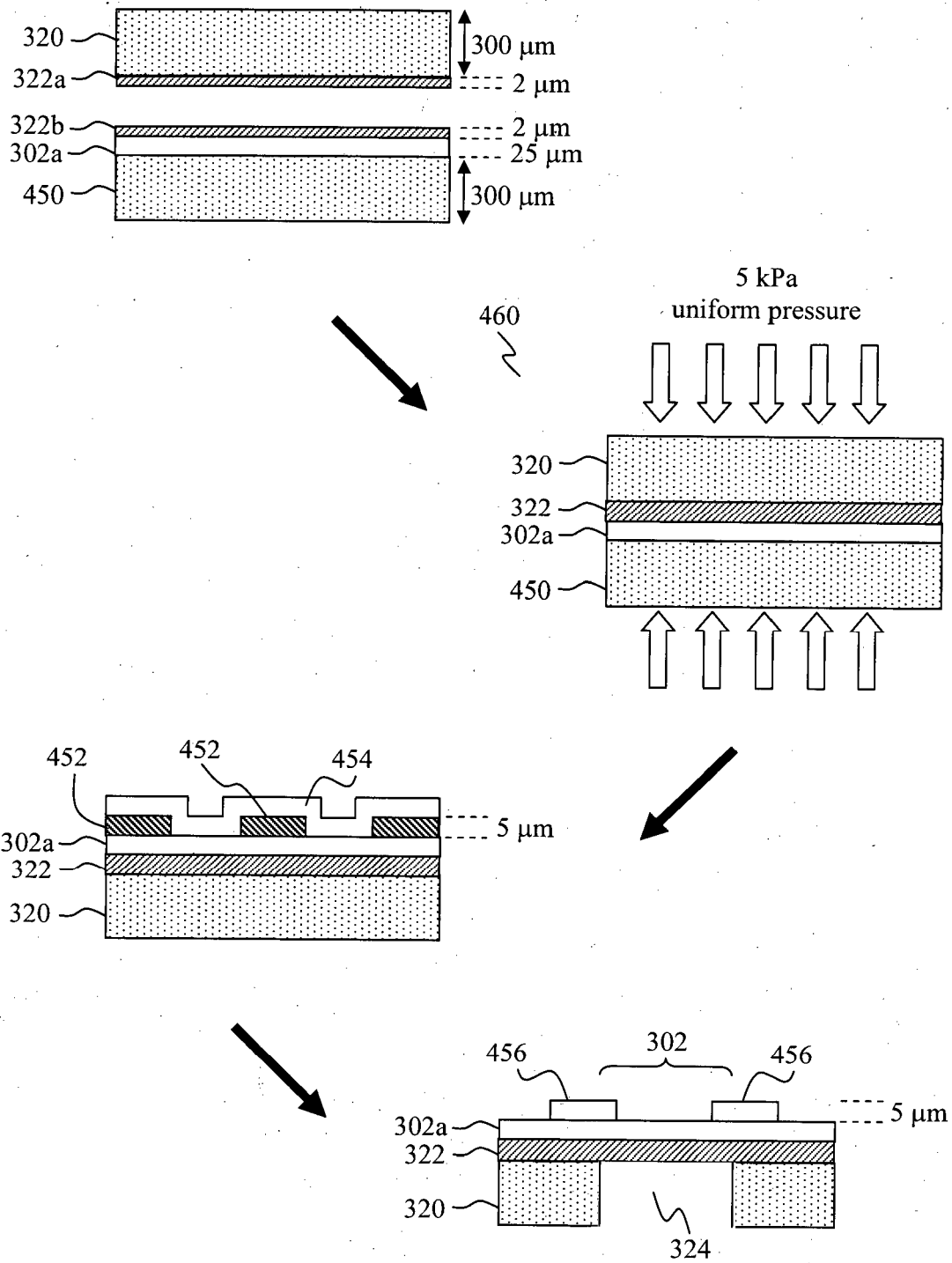


FIG. 4A

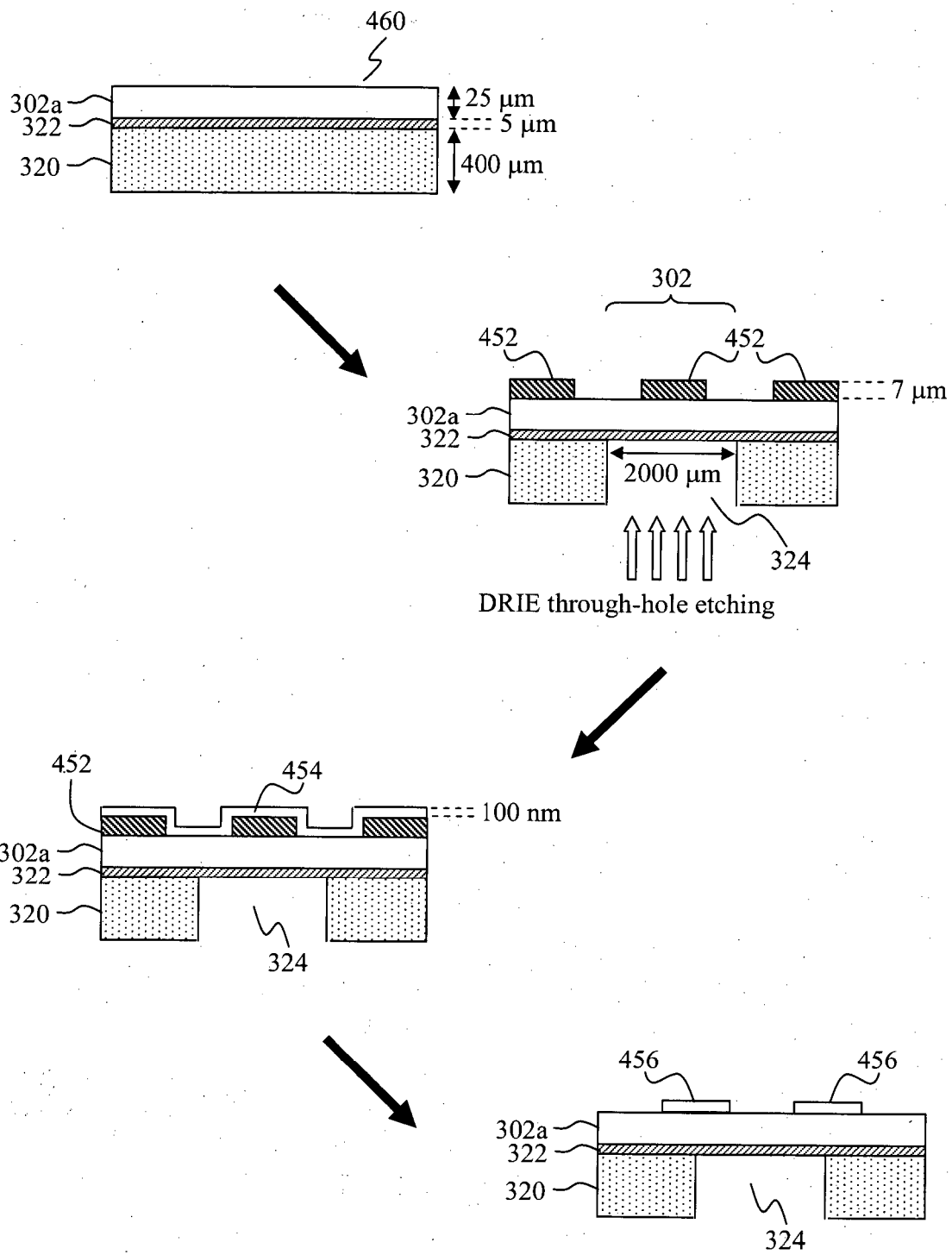


FIG. 4B

500

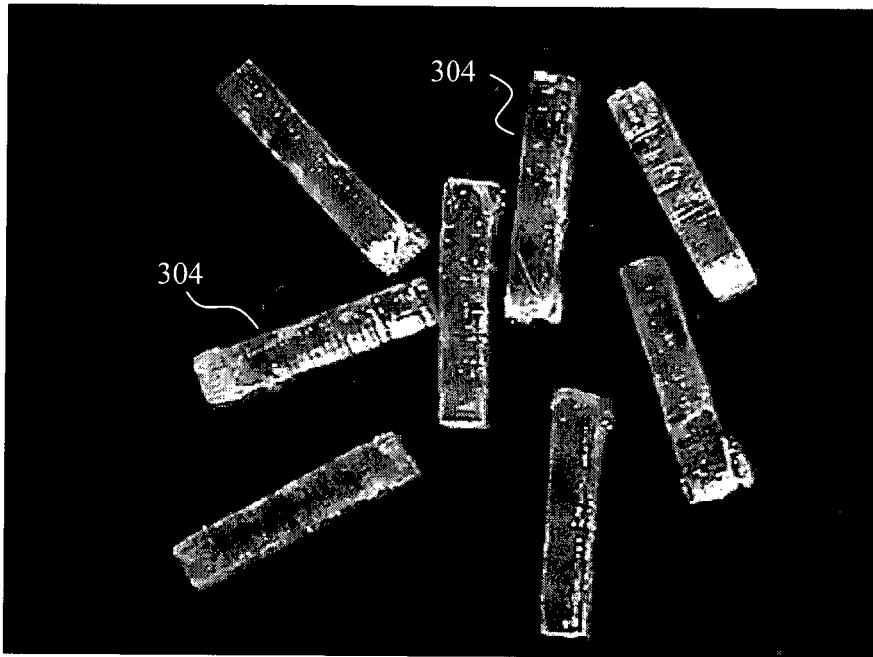


FIG. 5

600
~

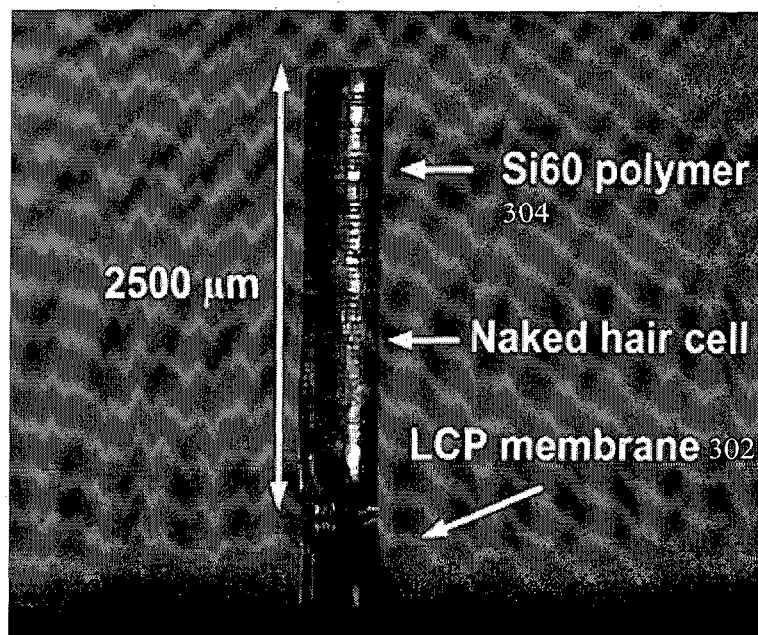


FIG. 6A

602
~

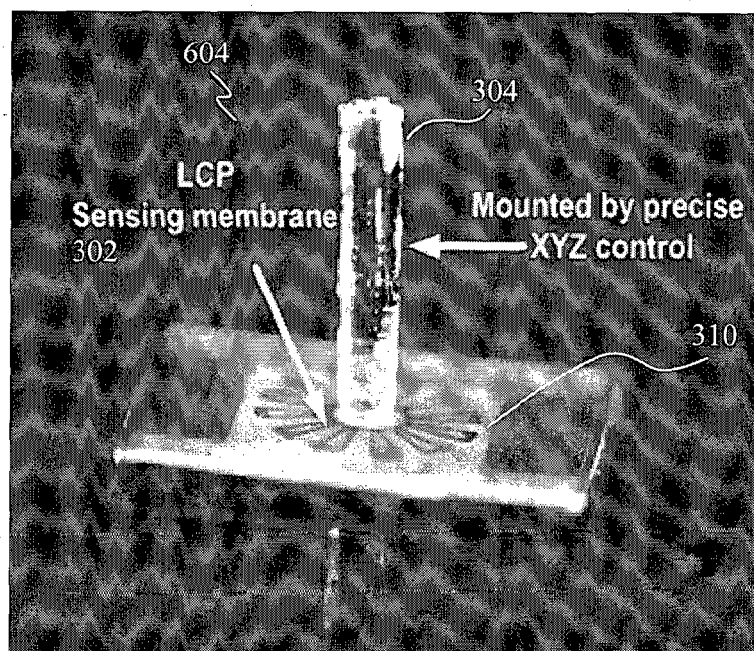


FIG. 6B

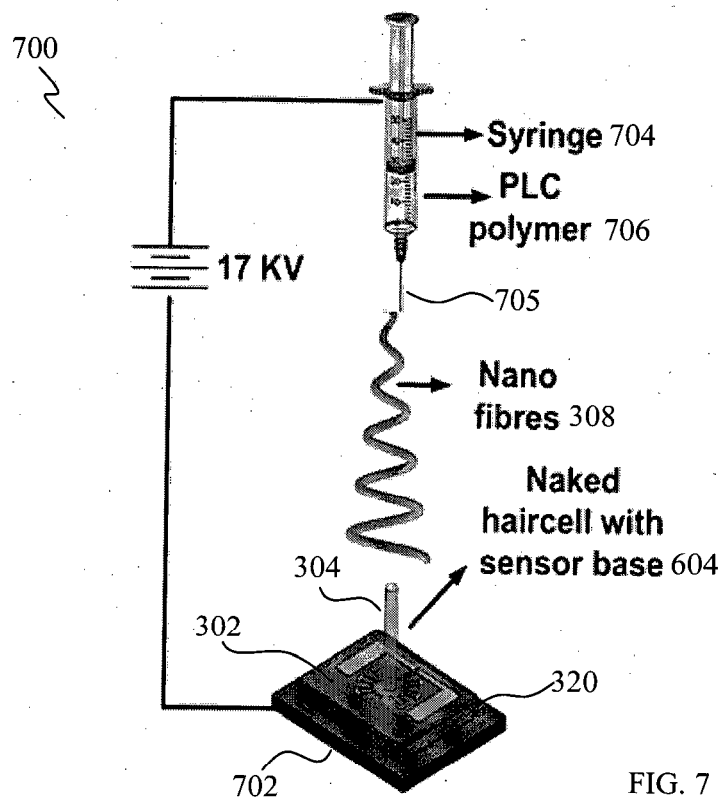


FIG. 7

800

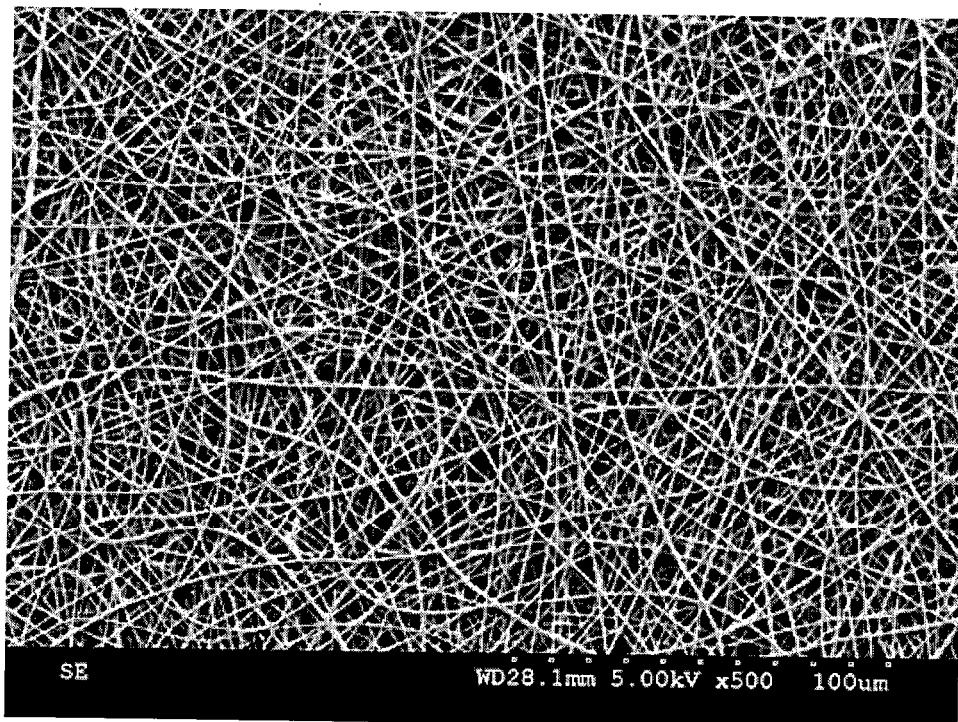


FIG. 8A

802
~

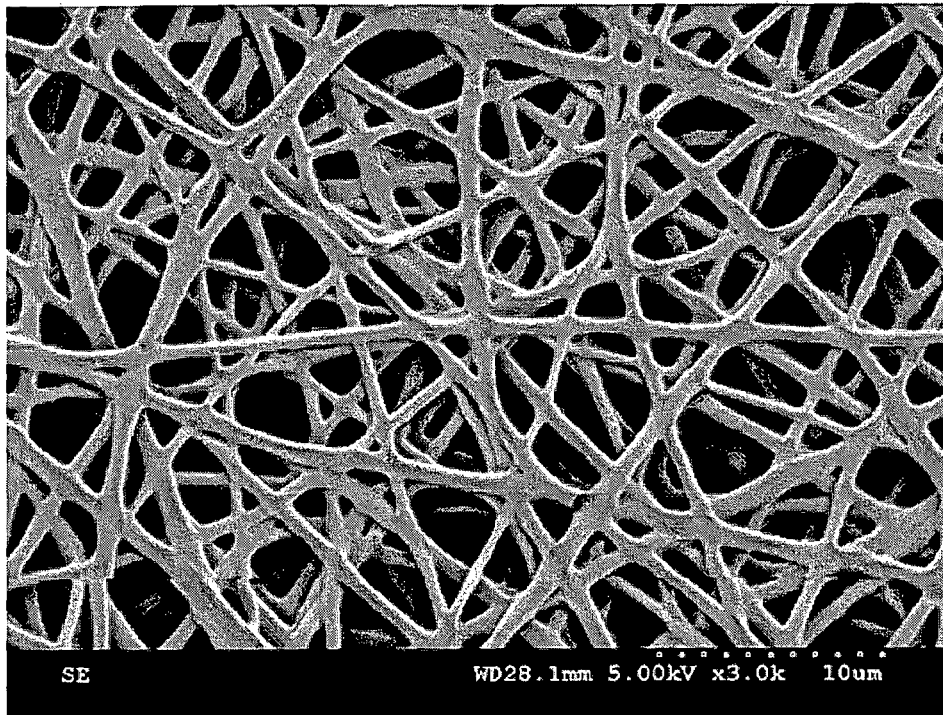


FIG. 8B

804
~

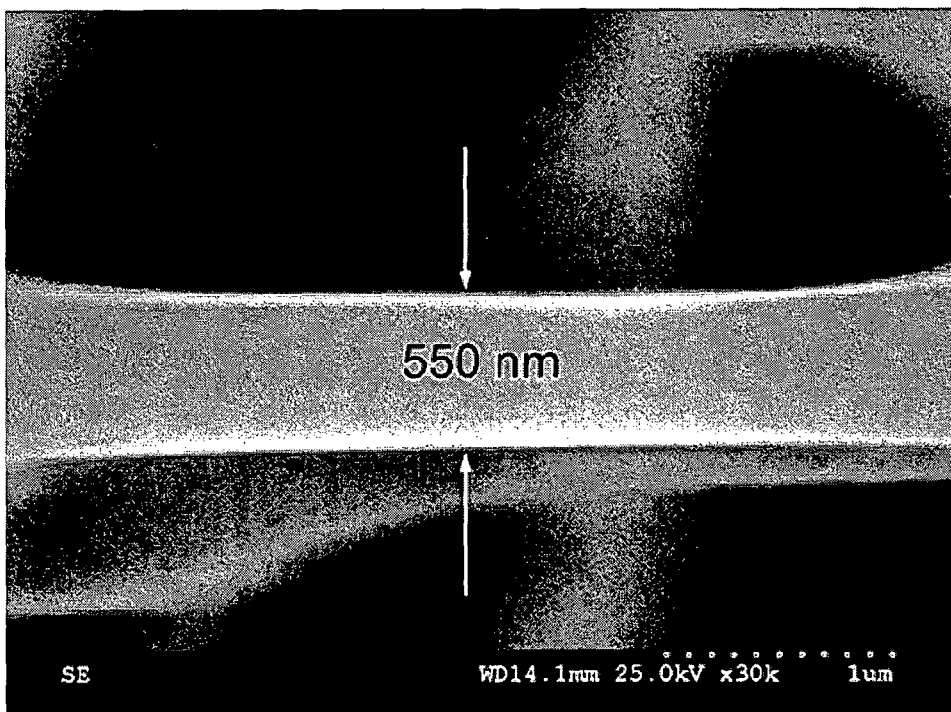


FIG. 8C

900

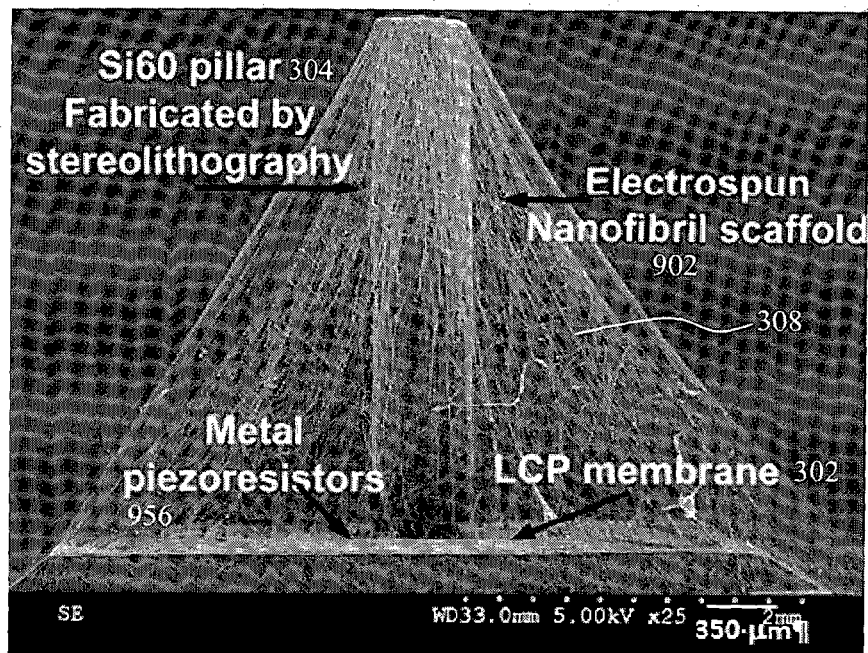


FIG. 9A

910

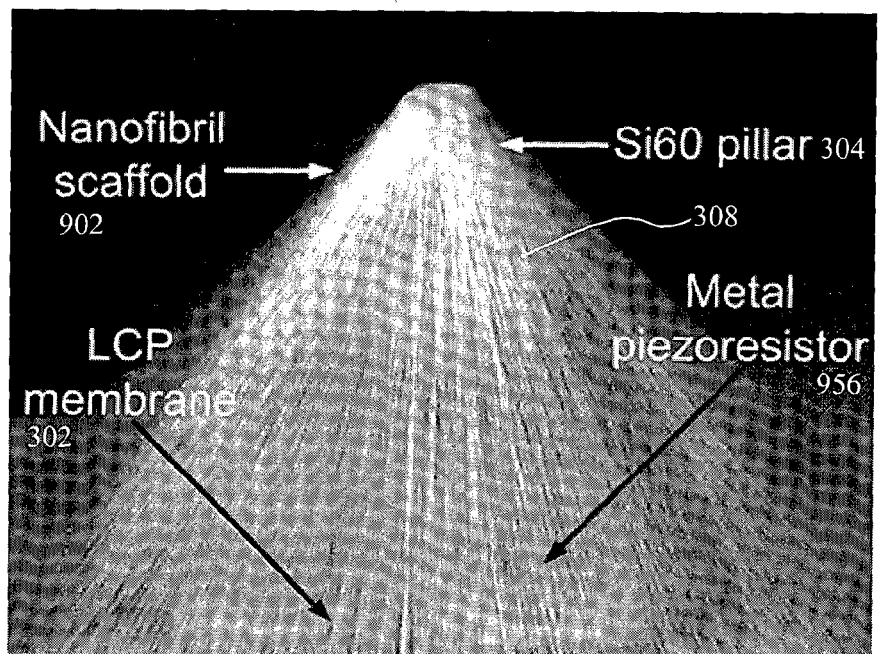


FIG. 9B

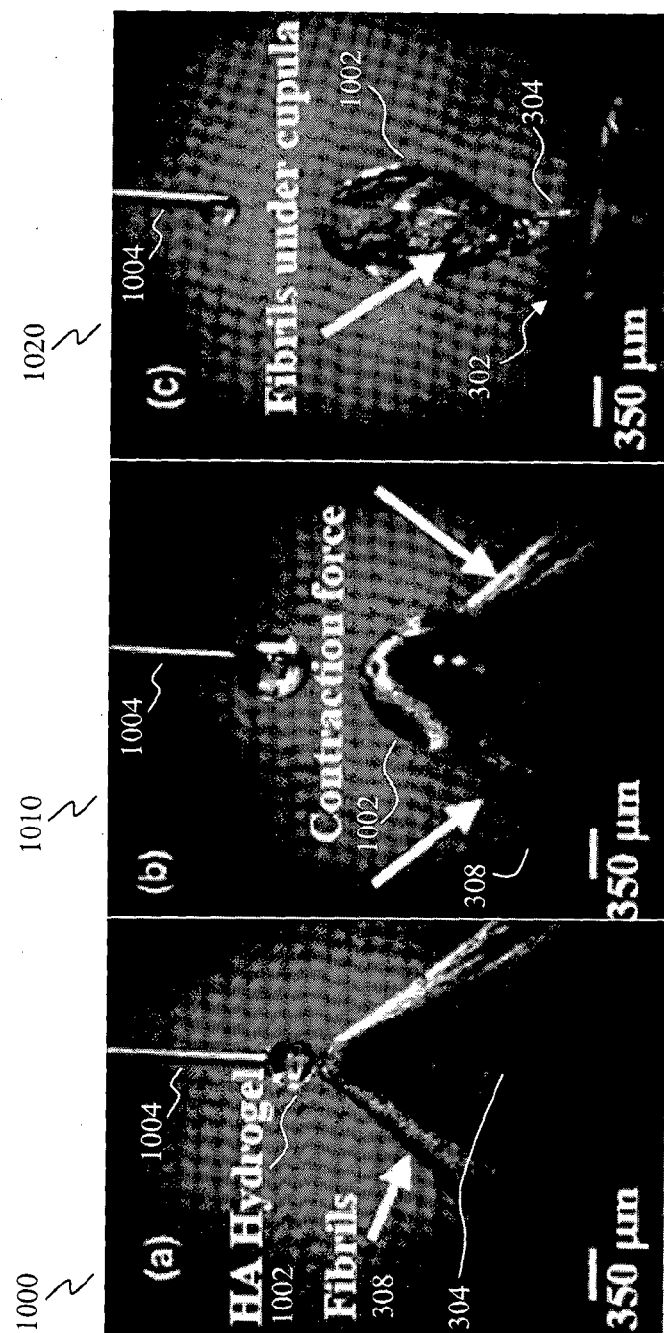


FIG. 10

1100

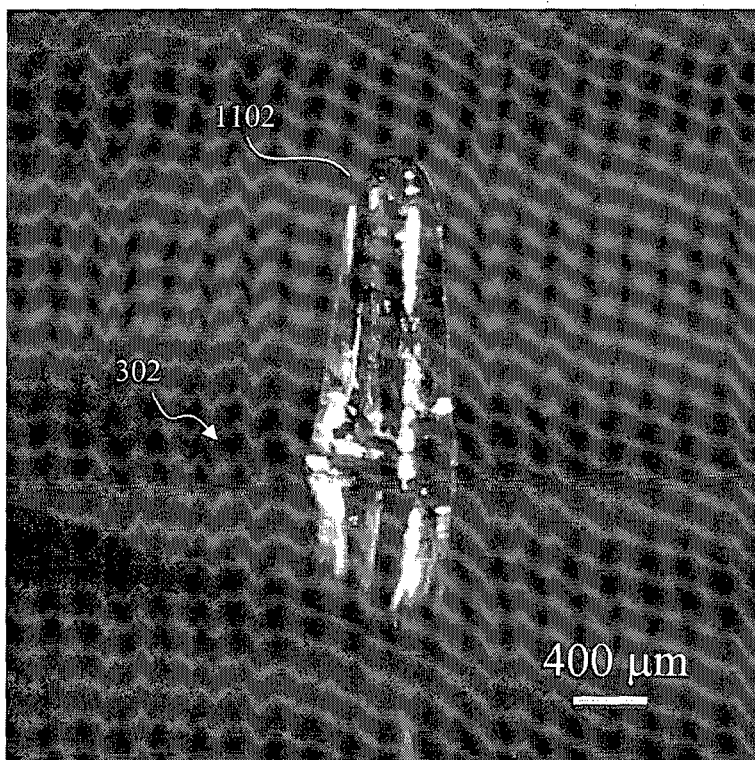


FIG. 11

1200
~

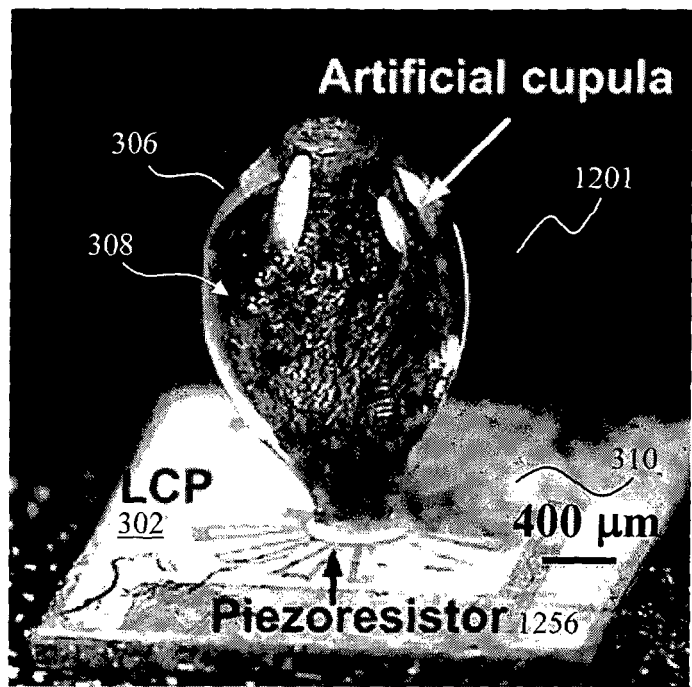


FIG. 12A

1210
~

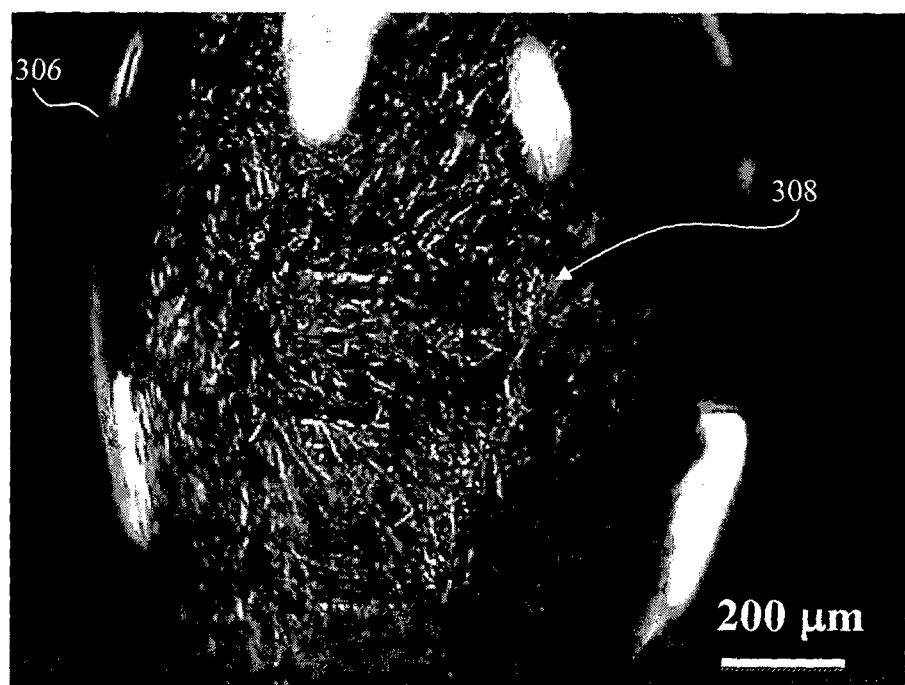


FIG. 12B