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(54) Title: IMPROVED BIOSENSOR DEVICE AND METHOD OF MANUFACTURING SAME

(57) Abstract

A new biosensor device (10) and biosensor device manufacturing method improves upon the prior art by providing high reliability devices that can be manufactured on an extremely cost basis and which are amenable to quality control procedures, which can be performed on individual fibers as well as the devices themselves. The improved biosensor devices are manufactured by first synthesizing a plurality of functional moieties onto a plurality of fibers (100), which may be solid and/or hollow, wherein at least one fiber receives one moiety. Once the functional moieties are synthesized onto the fibers, the fibers are bundled in a predetermined arrangement (120). The bundled fibers are then bonded or fused together to fix their predetermined arrangement (130). Finally, the bonded fiber bundle is sliced into a plurality of individual devices or chips (140).

