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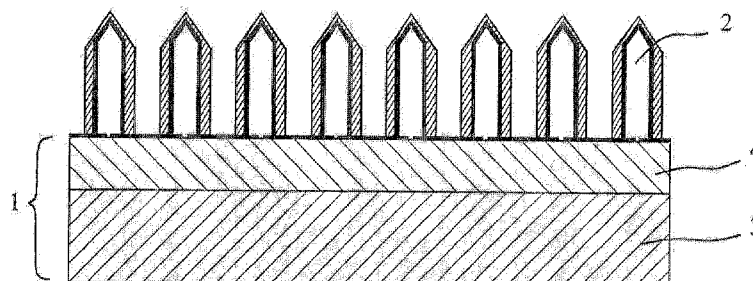


Fig. 1

(57) Abstract: The present invention provides a substrate (1) with a bulk layer (3) and a buffer layer (4) having a thickness of less than 2 μm arranged on the bulk layer (3) for growth of a multitude of nanowires (2) oriented in the same direction on a surface (5) of the buffer layer (4). A nanowire structure, a nanowire light emitting diode comprising the substrate (1) and a production method for fabricating the nanowire structure is also provided. The production method utilizes non-epitaxial methods for forming the buffer layer (4).