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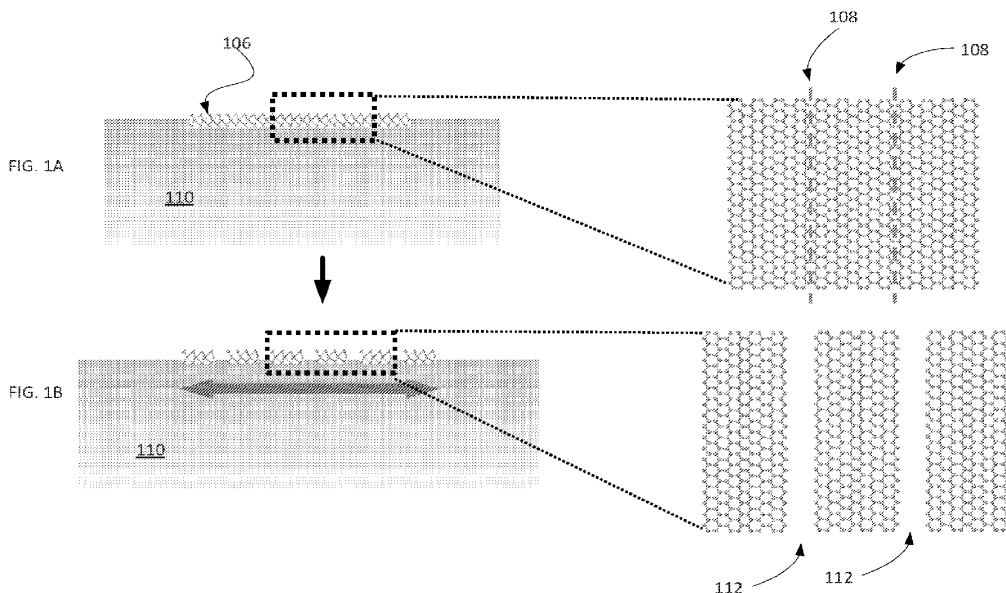
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(54) Title: SCALABLE NANOMANUFACTURING OF ATOMICALLY-THIN, HIGHLY-ALIGNED, HIGH-ASPECT-RATIO, HOMOCHIRAL NANORIBBONS, NANOWIRES, AND QUANTUM WIRES WITH ANGSTROM-PRECISE MORPHOLOGY



(57) Abstract: Deformation-induced formation of repeatably spatially-scalable nanowires / quantum wires / nanoribbons / nanogaps in a substantially single monolayer 2D material with the use of purely physical (in a specific case - purely mechanical) approach. The resulting one-dimensional (1D), linear 2D-nanoribbon/nanowire/quantum wire/nanogap structures exhibit highly uniform width, spacing, alignment, chemistry, and angstrom-precise edge chirality.

[Continued on next page]

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