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(54) **SEMICONDUCTOR DEVICES AND
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THEREOF**

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(71) Applicant: **Taiwan Semiconductor
Manufacturing Company, Ltd.,**
Hsinchu (TW)

(72) Inventors: **Shih-Yao Lin**, New Taipei City (TW);
Chih-Han Lin, Hsinchu City (TW);
Hsiao Wen Lee, Hsinchu City (TW)

(73) Assignee: **Taiwan Semiconductor
Manufacturing Company, Ltd.,**
Hsinchu (TW)

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(57)

ABSTRACT

A semiconductor device includes a plurality of semiconductor layers vertically separated from one another. Each of the plurality of semiconductor layers extends along a first lateral direction. The semiconductor device includes a gate structure that extends along a second lateral direction and comprises at least a lower portion that wraps around each of the plurality of semiconductor layers. The lower portion of the gate structure comprises a plurality of first gate sections that are laterally aligned with the plurality of semiconductor layers, respectively, and wherein each of the plurality of first gate sections has ends that each extend along the second lateral direction and present a first curvature-based profile.

