



US 20240213325A1

(19) **United States**

(12) **Patent Application Publication**  
**Vega et al.**

(10) **Pub. No.: US 2024/0213325 A1**

(43) **Pub. Date: Jun. 27, 2024**

(54) **PRODUCING STRESS IN NANOSHEET  
TRANSISTOR CHANNELS**

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(21) Appl. No.: **18/086,303**

(22) Filed: **Dec. 21, 2022**

**Publication Classification**

(51) **Int. Cl.**

<b>H01L 29/10</b>	(2006.01)
<b>H01L 27/092</b>	(2006.01)
<b>H01L 29/06</b>	(2006.01)
<b>H01L 29/08</b>	(2006.01)
<b>H01L 29/417</b>	(2006.01)
<b>H01L 29/423</b>	(2006.01)
<b>H01L 29/66</b>	(2006.01)
<b>H01L 29/775</b>	(2006.01)

(52) **U.S. Cl.**

CPC ..... **H01L 29/1054** (2013.01); **H01L 27/092**  
(2013.01); **H01L 29/0673** (2013.01); **H01L**  
**29/0847** (2013.01); **H01L 29/41733** (2013.01);  
**H01L 29/42392** (2013.01); **H01L 29/66439**  
(2013.01); **H01L 29/66545** (2013.01); **H01L**  
**29/66553** (2013.01); **H01L 29/775** (2013.01)

(57)

**ABSTRACT**

A semiconductor device includes a first stacked structure and a second stacked structure disposed on a substrate. The first stacked structure comprises a first plurality of gate structures alternately stacked with a first plurality of channel layers, and the second stacked structure comprises a second plurality of gate structures alternately stacked with a second plurality of channel layers. A first plurality of epitaxial source/drain regions are disposed on sides of the first stacked structure, and a second plurality of epitaxial source/drain regions are disposed on sides of the second stacked structure. A first dielectric layer is disposed between the first stacked structure and the substrate, and between the first plurality of epitaxial source/drain regions and the substrate. A second dielectric layer is disposed between the second stacked structure and the substrate. At least a portion of the second plurality of epitaxial source/drain regions contact the substrate.

