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(54) Title: FEFET DEVICE, SYSTEM, AND METHOD OF MANUFACTURING

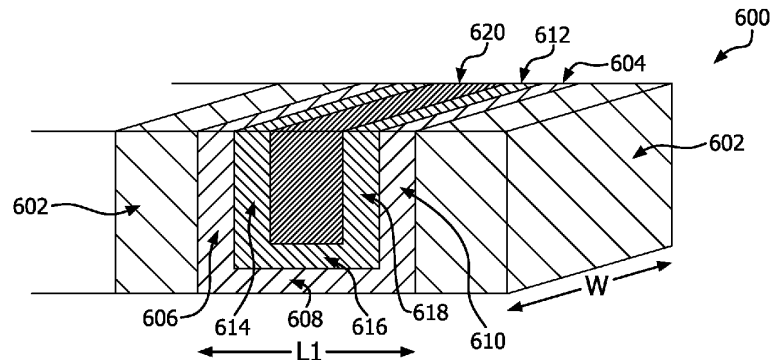


FIG. 6

(57) Abstract: A FeFET transistor (600) is disclosed that has a source electrode (602), a drain electrode (602), and a channel structure (604). The first portion (606) is disposed parallel to the source electrode along the first length. The second portion (608) is disposed parallel to the insulating layer and adjacent to the first portion. The third portion (610) is disposed parallel to the drain electrode and adjacent to the second portion. A ferroelectric structure (612) has a first (614), second (616), and third (618) portions. The first portion of the ferroelectric structure is disposed parallel to the first portion of the channel structure. The second portion of the ferroelectric structure is disposed parallel to the second portion of the channel structure. The third portion of the ferroelectric structure is disposed parallel to the third portion of the channel structure. The gate structure (620) is disposed within a space defined by the first, second, and third portions of the ferroelectric structure.

[Continued on next page]

Declarations under Rule 4.17:

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