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(54) Title (EN): SPACER-PATTERNED INVERTERS BASED ON THIN-FILM TRANSISTORS

(54) Title (FR): ONDULEURS À MOTIFS D'ÉLÉMENTS D'ESPACEMENT BASÉS SUR DES TRANSISTORS EN COUCHES MINCES

(57) Abstract:

(EN): A semiconductor device may include a first gate electrode and a second gate electrode. A first channel area and a second channel area may be above the first gate electrode, where the first channel area may include a first type channel material, and the second channel area may include a second type channel material. A third channel area and a fourth channel area may be above the second gate electrode, where the third channel area may include the first type channel material, and the fourth channel area may include the second type channel material. The third channel area may be separated from the first channel area by a spacer. An inverter may include the first gate electrode, the first channel area, and the second channel area, while another inverter may include the second gate electrode, the third channel area, and the fourth channel area. Other embodiments may be described/claimed.

(FR): L'invention concerne un dispositif semi-conducteur pouvant comprendre une première électrode grille et une seconde électrode grille. Une première zone de canal et une seconde zone de canal peuvent être au-dessus de la première électrode grille, la première zone de canal pouvant comprendre un matériau de canal de premier type, et la seconde zone de canal pouvant comprendre un matériau de canal de second type. Une troisième zone de canal et une quatrième zone de canal peuvent être au-dessus de la deuxième électrode grille, la troisième zone de canal pouvant comprendre le matériau de canal de premier type, et la quatrième zone de canal pouvant comprendre le matériau de canal de second type. La troisième zone de canal peut être séparée de la première zone de canal par un élément d'espacement. Un onduleur peut comprendre la première électrode grille, la première zone de canal et la seconde zone de canal, tandis qu'un autre onduleur peut comprendre la deuxième électrode grille, la troisième zone de canal et la quatrième zone de canal. L'invention concerne également d'autres modes de réalisation.

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