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(54) Title: TUNGSTEN DIGITLINES AND METHODS OF FORMING AND OPERATING THE SAME

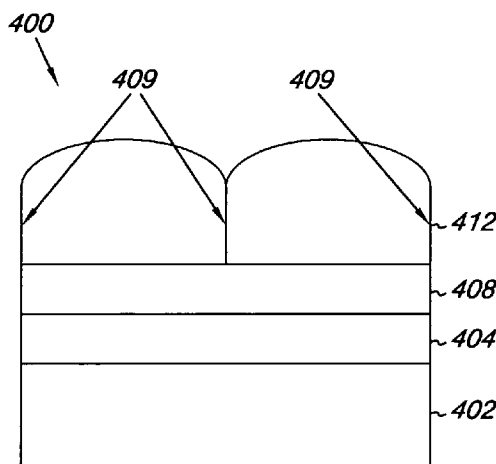


Fig. 4C

(57) Abstract: Methods, devices, and systems for using and forming tungsten digitlines have been described. The tungsten digitlines formed according to embodiments of the present disclosure can be formed with a tungsten (W) monolayer (404) on a tungsten nitride (WN_x) substrate (402), a boron (B) monolayer (308) on the W monolayer, and a bulk W layer (412) on the B monolayer. The bulk W layer has a grain size between 100 nm and 600 nm. The digitline can be less than 50 nm thick. The capacitance and resistance of the digitline are thus reduced.

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