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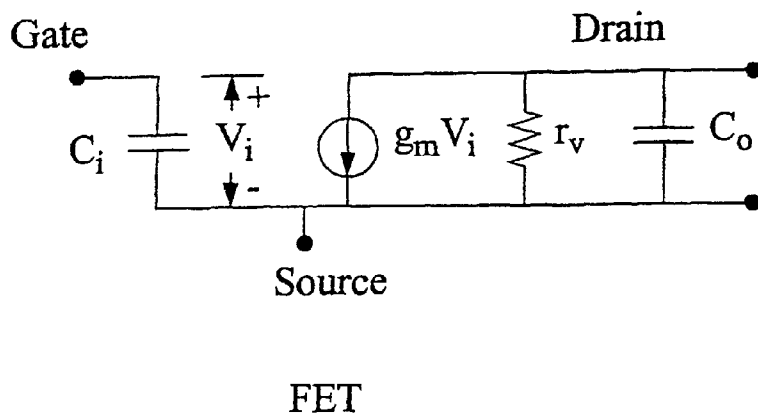
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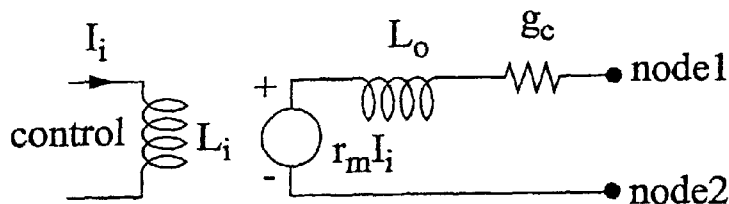
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(54) Title: WIDEBAND DUAL AMPLIFIER CIRCUITS



(57) Abstract: Dual amplifying circuits having a magnetic tunnel junction device (MTJ) and a field effect transistor (FET) configured in a complementing set are disclosed herein. In one embodiment, the field effect transistor (FET) is operable to control a current level of a current operating signal flowing through the magnetic tunnel junction device (MTJ). In another embodiment, the magnetic tunnel junction device (MTJ) is operable to control a voltage level of a voltage signal being applied to a gate terminal of the field effect transistor (FET). The gain-bandwidth product of both embodiments is greater than the individual gain-bandwidth products of the individual devices through the elimination of noise contributing resistive type circuit elements.



MTJ



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