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[54] **CONTROLLED CURRENT OUTPUT STAGE AMPLIFIER CIRCUIT AND METHOD**

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[57] ABSTRACT

[73] Assignee: **Texas Instruments Incorporated**, Dallas, Tex.

An amplifier circuit (10) is provided. The amplifier (10) includes an amplifier stage (14) coupled to an output stage (18). Output stage (18) comprises a sourcing circuit (20) and a sinking circuit (22). The current in sinking circuit (22) is approximately mirrored at low current in mirror circuit (34). At higher currents, resistor (36) maintains the current in mirror circuit (34) below the current in sinking circuit (22). A diode (38) diverts current to mirror circuit (34) to aid sinking circuit (22) in sinking current from a load (12). A current source (29) supplies current to sourcing circuit (20) and mirror circuit (34). A control signal output by amplifier stage (14) causes mirror circuit (34) to draw or not draw current from current source (29). If mirror circuit (34) draws current from current source (29), output stage (18) sinks current in sinking circuit (22). If mirror circuit (34) does not draw current from current source (29), output stage (18) sources current through sourcing circuit (20).

[21] Appl. No.: **348,662**

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[51] Int. Cl.⁶ **H03F 3/26**

[52] U.S. Cl. **330/273; 330/274**

[58] Field of Search **330/262, 270, 330/273, 274; 327/309**

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20 Claims, 2 Drawing Sheets



