

(21) Application No: 1813424.7  
 (22) Date of Filing: 29.06.2016  
 Date Lodged: 17.08.2018  
 (30) Priority Data:  
 (31) 62279956 (32) 18.01.2016 (33) US  
 (31) 15168680 (32) 31.05.2016 (33) US  
 (86) International Application Data:  
 PCT/US2016/040072 En 29.06.2016  
 (87) International Publication Data:  
 WO2017/127132 En 27.07.2017

(51) INT CL:  
 H03F 3/217 (2006.01) H02M 3/158 (2006.01)  
 H03F 3/45 (2006.01)  
 (56) Documents Cited:  
 EP 1367704 A2 WO 2007/136800 A2  
 US 20150222184 A1  
 (58) Field of Search:  
 INT CL H03F  
 Other: EPODOC, WPI

(71) Applicant(s):  
 Cirrus Logic International Semiconductor Ltd.  
 7B Nightingale Way, Quartermile, Edinburgh,  
 EH3 9EG, United Kingdom  
 (72) Inventor(s):  
 Zhaohui He  
 Eric J. King  
 Siddharth Maru  
 John Laurence Melanson  
 (74) Agent and/or Address for Service:  
 Haseltine Lake LLP  
 Redcliff Quay, 120 Redcliff Street, BRISTOL, BS1 6HU,  
 United Kingdom

(54) Title of the Invention: **Switched mode converter with variable common mode voltage buffer**  
 Abstract Title: **Switched mode converter with variable common mode voltage buffer**

(57) A switching power stage for producing a load voltage at a load output of the switching power stage, wherein the load output comprises a first load terminal having a first load voltage and a second load terminal having a second load voltage such that the load voltage comprises a difference between the first and the second load voltages, that may include: a power converter comprising a power inductor and a plurality of switches, wherein the power converter is configured to drive a power converter output terminal; a linear amplifier configured to drive a linear amplifier output terminal; and a controller for controlling the plurality of switches and the linear amplifier in order to generate the load voltage as a function of an input signal to the controller such that energy delivered to the load output is supplied predominantly by the power converter.

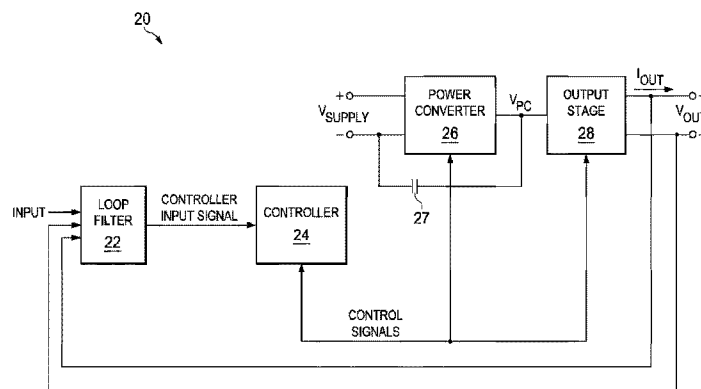


FIG. 3