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(19) **United States**(12) **Patent Application Publication****Auer et al.**(10) **Pub. No.: US 2022/0377860 A1**(43) **Pub. Date: Nov. 24, 2022**(54) **LED-DRIVER WITH PFC AND WIRED BUS INTERFACE****Publication Classification**(51) **Int. Cl.****H05B 45/355** (2006.01)**H05B 47/185** (2006.01)(52) **U.S. Cl.****CPC** **H05B 45/355** (2020.01); **H05B 47/185** (2020.01)(71) Applicant: **Tridonic GmbH & Co KG**, Dornbirn (AT)(72) Inventors: **Hans Auer**, Dornbirn (AT); **Clemens Kucera**, Bludenz (AT); **Lukas Saccavini**, Dornbirn (AT); **Stefan Stark**, Muntlix (AT)(73) Assignee: **Tridonic GmbH & Co KG**, Dornbirn (AT)

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The invention relates to an LED-driver, comprising an actively switched PFC circuitry and a bus interface for a wire-bound bus, wherein a voltage supply for the bus interface for powering the bus is tapped off the output voltage of the active PFC circuitry, further comprising a control circuitry for a feedback control of an output voltage of the actively switched PFC by controlling a switch of the PFC, wherein the time constant of the feedback control of the control circuitry is faster during time periods in which the bus interface is transmitting or receiving signals, compared to time periods without activity.

