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Lidsky et al.(10) **Pub. No.: US 2022/0360170 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **POWER DELIVERY CONTROL CIRCUIT**

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CPC **H02M 3/155** (2013.01)(73) Assignee: **Empower Semiconductor, Inc.,**
Milpitas, CA (US)(57) **ABSTRACT**

A power circuit is disclosed. The power circuit includes an input node, a plurality of inductors each connected to an output node, a plurality of phases each configured to provide current to one of the inductors, and a control circuit configured to trigger the phases. The phases are configured to provide current to one of the inductors in response to being triggered by the control circuit, the control circuit is configured to determine a variable time difference between a first phase being triggered and a second phase being triggered, and the time difference is based at least in part on a voltage difference between an input voltage at the input node and an output voltage at the output node.

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