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(43) **Pub. Date: Dec. 29, 2022**(54) **PRE-CONDITIONING A NODE OF A CIRCUIT****Publication Classification**(71) Applicant: **Cirrus Logic International Semiconductor Ltd.**, Edinburgh (GB)(72) Inventors: **Hamed Sadati**, Swindon (GB); **John A. Breslin**, Glasgow (GB); **Sushanth Hegde**, Edinburgh (GB); **John L. Melanson**, Austin, TX (US)(73) Assignee: **Cirrus Logic International Semiconductor Ltd.**, Edinburgh (GB)(21) Appl. No.: **17/356,606**(22) Filed: **Jun. 24, 2021**(51) **Int. Cl.****H03K 17/30** (2006.01)**H03K 17/042** (2006.01)**H03K 17/06** (2006.01)(52) **U.S. Cl.**CPC ..... **H03K 17/302** (2013.01); **H03K 17/04206** (2013.01); **H03K 17/063** (2013.01)

(57)

**ABSTRACT**

Pre-conditioning circuitry for pre-conditioning a node of a circuit to support a change in operation of the circuit, wherein the circuit is operative to change a state of the node to effect the change in operation of the circuit, and wherein the pre-conditioning circuitry is configured to apply a voltage, current or charge directly to the node to reduce the magnitude of the change to the state of the node required by the circuit to achieve the change in operation of the circuit.

