



US 20220352888A1

(19) **United States**(12) **Patent Application Publication**
BLIN(10) **Pub. No.: US 2022/0352888 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **BIASING OF RADIO-FREQUENCY
SWITCHES**(71) Applicant: **SKYWORKS SOLUTIONS, INC.**,
Irvine, CA (US)(72) Inventor: **Guillaume Alexandre BLIN**, Carlisle,
MA (US)(21) Appl. No.: **17/721,203**(22) Filed: **Apr. 14, 2022****Related U.S. Application Data**(63) Continuation of application No. 16/909,157, filed on
Jun. 23, 2020, now Pat. No. 11,394,384, which is a
continuation of application No. 16/236,431, filed on
Dec. 29, 2018, now Pat. No. 10,693,459.(60) Provisional application No. 62/612,535, filed on Dec.
31, 2017.**Publication Classification**(51) **Int. Cl.****H03K 17/687** (2006.01)**H03K 17/00** (2006.01)**H03K 17/693** (2006.01)(52) **U.S. Cl.****CPC** **H03K 17/6874** (2013.01); **H03K 17/005**
(2013.01); **H03K 17/693** (2013.01)

(57)

ABSTRACT

In some embodiments, a switching circuit can include a first node and a second node, and a plurality of transistors implemented in a stack configuration between the first node and the second node, with each transistor having a source, a drain and a gate, and the transistors being configured to be in an ON state or an OFF state to respectively allow or inhibit passage of a signal between the first and second nodes. The switching circuit can further include a bias circuit configured to bias the transistors from a bias node. The bias circuit can include a gate-gate resistor that couples each pair of neighboring transistors of the plurality of transistors, and a feed node coupled to the bias node, with the feed node being connected directly to the gate of a selected transistor of the plurality of transistors.

