

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0223168 A1 Dinc et al.

Jul. 4, 2024 (43) **Pub. Date:**

(54) BROADBAND FREQUENCY MULTIPLIER WITH HARMONIC SUPPRESSION

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(21) Appl. No.: 18/148,845

(22) Filed: Dec. 30, 2022

Publication Classification

(51) Int. Cl. H03K 5/00 (2006.01)G06F 1/08 (2006.01)H03H 7/01 (2006.01)

(52) U.S. Cl.

CPC H03K 5/00006 (2013.01); G06F 1/08 (2013.01); H03H 7/0115 (2013.01); H03H 7/**0161** (2013.01)

(57)**ABSTRACT**

Described embodiments include a circuit having a quadrature phase generator circuit having differential generator inputs, in-phase differential generator outputs and quadrature-phase differential generator outputs. A first frequency multiplier circuit has first differential multiplier inputs and a first multiplier output, wherein the first differential multiplier inputs are coupled to the in-phase differential generator outputs. A second frequency multiplier circuit has second differential multiplier inputs and a second multiplier output. The second multiplier differential inputs are coupled to the quadrature-phase differential generator outputs. A transformer includes a primary inductor and a secondary inductor, wherein the primary inductor is coupled between the first and second multiplier outputs, and the second inductor is coupled between an output voltage terminal and a ground terminal.

