

# (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2022/0399882 A1 RAMIREZ et al.

### Dec. 15, 2022 (43) **Pub. Date:**

### (54) LOW POWERED CLOCK DRIVING

(71) Applicant: INTERNATIONAL BUSINESS MACHINES CORPORATION,

Armonk, NY (US)

(72) Inventors: DANIEL RAMIREZ, Rochester, MN

(US); SUDIPTO CHAKRABORTY,

Plano, TX (US)

- Appl. No.: 17/347,760
- (22) Filed: Jun. 15, 2021

## **Publication Classification**

(51) Int. Cl. H03K 3/353 (2006.01)H03K 5/13 (2006.01)

U.S. Cl. (52)CPC ...... H03K 3/353 (2013.01); H03K 5/13 (2013.01); H03K 2005/00195 (2013.01)

#### (57)ABSTRACT

A clock driver circuit for low powered clock driving may include: a multiple phase divider; a buffer supplying at least one of multiple phases to the multiple phase divider at a center frequency that is an integer multiple of an input frequency; and wherein the multiple phase divider and the buffer share a same current from a supply rail.

