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TYAGI(10) **Pub. No.: US 2022/0385234 A1**(43) **Pub. Date: Dec. 1, 2022**(54) **VOLTAGE CONTROLLED OSCILLATOR
WITH HIGH Q FACTOR TUNING BANKS****Publication Classification**(51) **Int. Cl.****H03B 5/12** (2006.01)**H03L 5/00** (2006.01)(52) **U.S. Cl.****CPC** **H03B 5/1265** (2013.01); **H03L 5/00**
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N.V., Geneva (CH)**(21) Appl. No.: **17/750,137**(22) Filed: **May 20, 2022****Related U.S. Application Data**(60) Provisional application No. 63/193,979, filed on May
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(57)

ABSTRACT

A voltage controlled oscillator (VCO) has a VCO core and a tuning bank. The tuning bank includes first and second tuning capacitors. A main switch is coupled between the first and second tuning capacitors. The tuning bank also includes control switches that receive a control signal to selectively activate the tuning bank. The main switch receives a level-shifted control signal to activate the tuning bank.

