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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0416752 A1**
(43) **Pub. Date: Dec. 29, 2022**(54) **CAPACITOR CIRCUIT OF A MULTI-BANK
ARRAY TYPE AND A CAPACITANCE
VARIABLE CIRCUIT HAVING THE SAME**(30) **Foreign Application Priority Data**

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Suwon-si (KR)(57) **ABSTRACT**(73) Assignee: **SAMSUNG
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A multi-bank array type capacitor circuit is provided. The capacitor circuit includes a first cap bank including first to m^{th} switch-capacitor circuits which are connected in parallel with each other, wherein the first to m^{th} switch-capacitor circuits have different capacitances based on a first weight; and a second cap bank, connected in parallel with the first cap bank, and including first to m^{th} switch-capacitor circuits which are connected in parallel with each other, wherein the first to m^{th} switch-capacitor circuits have different capacitances based on a second weight that is different from the first weight.

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