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### (54) VOLTAGE IDENTIFICATION SIGNAL DECODER WITH PRECHARGING

(71) Applicant: TEXAS INSTRUMENTS

**INCORPORATED**, Dallas, TX (US)

Inventors: Vishal SHAW, Howrah City (IN);

**Preetam Charan Anand** TADEPARTHY, Bangalore (IN); Mayank JAIN, Bangalore (IN)

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#### (57)ABSTRACT

In an example, an apparatus includes a first decoder circuit having a first voltage identification (VID) analog input and a first digital output. The apparatus also includes a precharge circuit having a digital input and a first analog output, the digital input coupled to the first digital output. The apparatus also includes a second decoder circuit having a second VID analog input, a precharge analog input and a second digital output, the precharge analog input coupled to the first digital output. The apparatus also includes a multiplexer having a multiplexer output and first and second multiplexer inputs, the first multiplexer input coupled to the first digital output, and the second multiplexer input coupled to the second digital output.

