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UDAYASHANKAR et al.(10) **Pub. No.: US 2022/0407483 A1**(43) **Pub. Date: Dec. 22, 2022**(54) **MULTIPATH PROGRAMMABLE GAIN
INSTRUMENTATION AMPLIFIER
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(57)

ABSTRACT

A system includes an instrumentation amplifier (INA) including a first transistor coupled to a first input node, and a second transistor coupled to a second input node. The INA also includes a resistor coupled between the first transistor and the second transistor. The INA includes a gain resistor network coupled to the resistor and to the first and second transistors, where the gain resistor network includes two or more gain resistors. The system also includes a voltage to current converter, where the voltage to current converter is coupled to the resistor and the gain resistor network.

