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(71) Applicant (for all designated States except US): **AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH** [SG/SG]; 1 Fusionopolis Way, #20-10 Connexis, 138632 Singapore (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHEONG, Jiahao** [MY/SG]; c/o Institute of Microelectronics, 11 Science Park Road, Singapore Science Park 2, Singapore 117685 (SG). **KHANNUR, Pradeep Basappa** [IN/SG]; c/o Institute of Microelectronics, 11 Science Park Road, Singapore Science Park 2, Singapore 117685 (SG). **CHAN, Kok Lim** [SG/SG]; c/o Institute of Microelectronics, 11 Science Park Road, Singapore Science Park 2, Singapore 117685 (SG). **JE, Minkyu** [SG/SG]; c/o Institute of Microelectronics, 11 Science Park Road, Singapore Science Park 2, Singapore 117685 (SG).(74) Agent: **VIERING, JENTSCHURA & PARTNER LLP**; P.O. Box 1088, Rochor Post Office, Rochor Road, Singapore 911833 (SG).

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(54) Title: AN ANALOGUE TO DIGITAL CONVERTER, AN INTEGRATED CIRCUIT AND A MEDICAL DEVICE

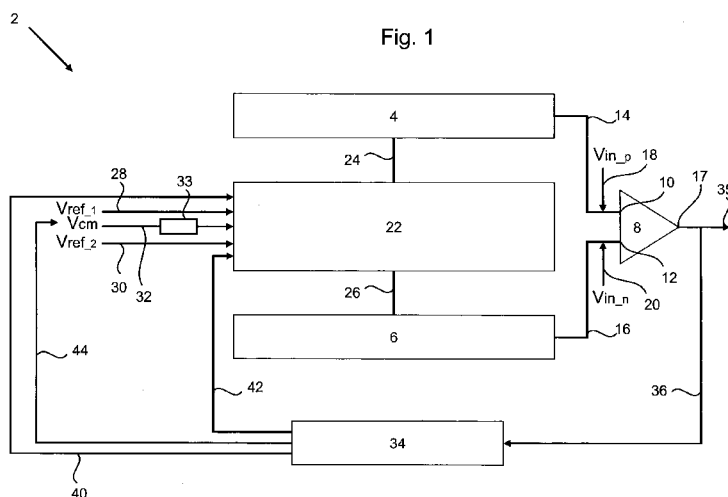


Fig. 1

(57) Abstract: An analogue to digital converter comprises a first input connection to receive a first part of the analogue input signal; a second input connection to receive a second part of the analogue input signal; a first and second plurality of capacitors, each capacitor of the first plurality of capacitors forms a capacitor pair with a corresponding capacitor in the second plurality of capacitors; wherein, during a sampling period, the first input connection couples the first part of the analogue input signal to a first contact of each capacitor of the first plurality of capacitors, the second input connection couples the second part of the analogue input signal to a first contact of each capacitor of the second plurality of capacitors, and a switching array couples a second contact of each capacitor of the first and second plurality of capacitors to a common mode voltage to determine a first bit of the digital output signal.