J. N. Sarvaiya, P. C. Pandey, and V. K. Pandey, An impedance detector for glottography, IETE J. of Research, vol. 55(3), pp. 100-105, 2009

Contact: Prof. P. C. Pandey Department of Electrical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai. mailto: pcpandey@ee.iitb.ac.in

Abstract - Impedance glottography, or electroglottography, is a noninvasive technique for monitoring the variation of the degree of contact between the vibrating vocal cords during voice production. Electrical impedance is sensed using a pair of electrodes placed on either side of the larynx, by injecting a low-level high-frequency current. A wide-band impedance detector circuit has been developed using a precision rectifier based on voltage feedback clamping amplifier and approximately linear-phase lowpass filter. The circuit can be used for obtaining electroglottogram signal for diagnosis of vocal fold disorders.
