An electrically controllable oscillator circuit (30) comprises two balanced transconductance circuits (G1, G2), each including transistor pairs arranged as inverters (Inv14) and as resistors (Inv5-6). The oscillation frequency (f) and the quality factor (Q) of the oscillator circuit (30) are controlled by a means of a single control signal provided by a combined control circuit (Inv7, Dif, IM1, IM2). The current mirror circuit (IM1, IM2) and a differential pair (Dif) derived the control signal for adjusting the quality factor (Q) from a resistor-connected further transistor pair (Inv7) connected to the control signal for adjusting the frequency (f). The quality factor of an electrically controllable filter arrangement including similar transconductance circuits (G-3-9) is adjusted by means of the control signal generated by the control circuit via a buffer circuit (B) and a low-pass circuit (C3).