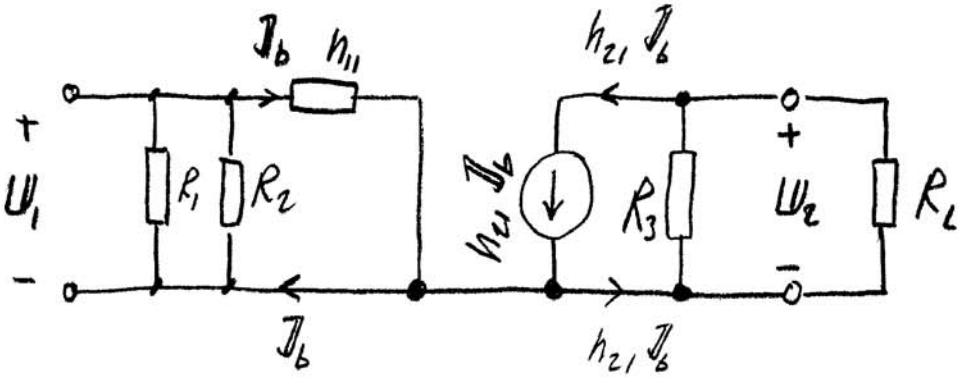
E12 EKVIVALENT SIGNALSCHEMA



$$F = \frac{U_2}{U_1} \quad \ldots (1)$$

$$U_2 = - h_{21} I_b \cdot \frac{R_3 \cdot R_L}{R_3 + R_L} \quad \ldots (2)$$

$$U_1 = h_{11} I_b \quad \ldots (3)$$

(2) OCH (3) INS I (1) →

$$F = \ldots\ldots = \underline{-187}$$

$$\frac{1}{Z_{in}} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{h_{11}} \rightarrow Z_{in} = \underline{470\,\Omega}$$

$$Z_{ut} = R_3 \rightarrow Z_{ut} = \underline{4k\Omega}$$