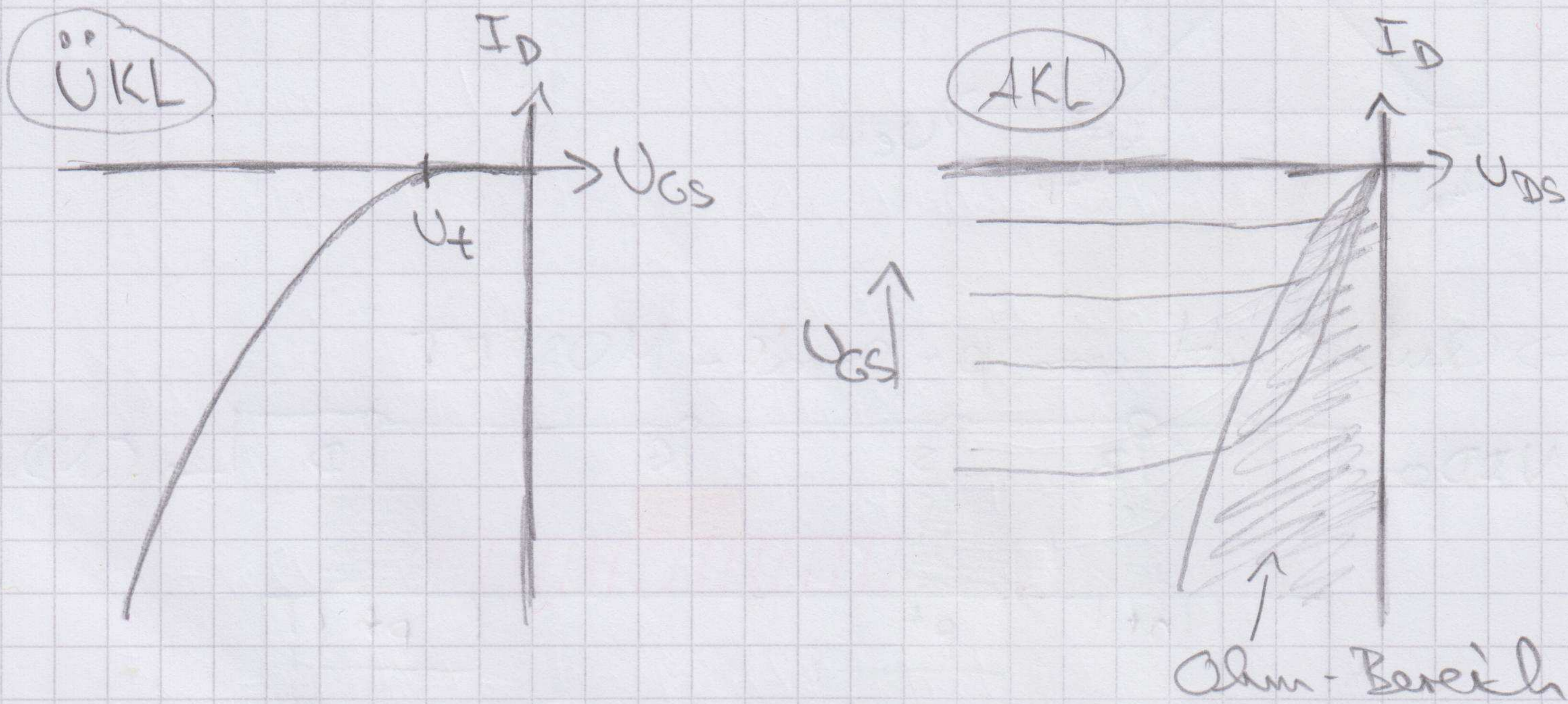


Versuch 1

→ p-Kanal-MOSFET (Anreicherungsstyp), Skript 3-8



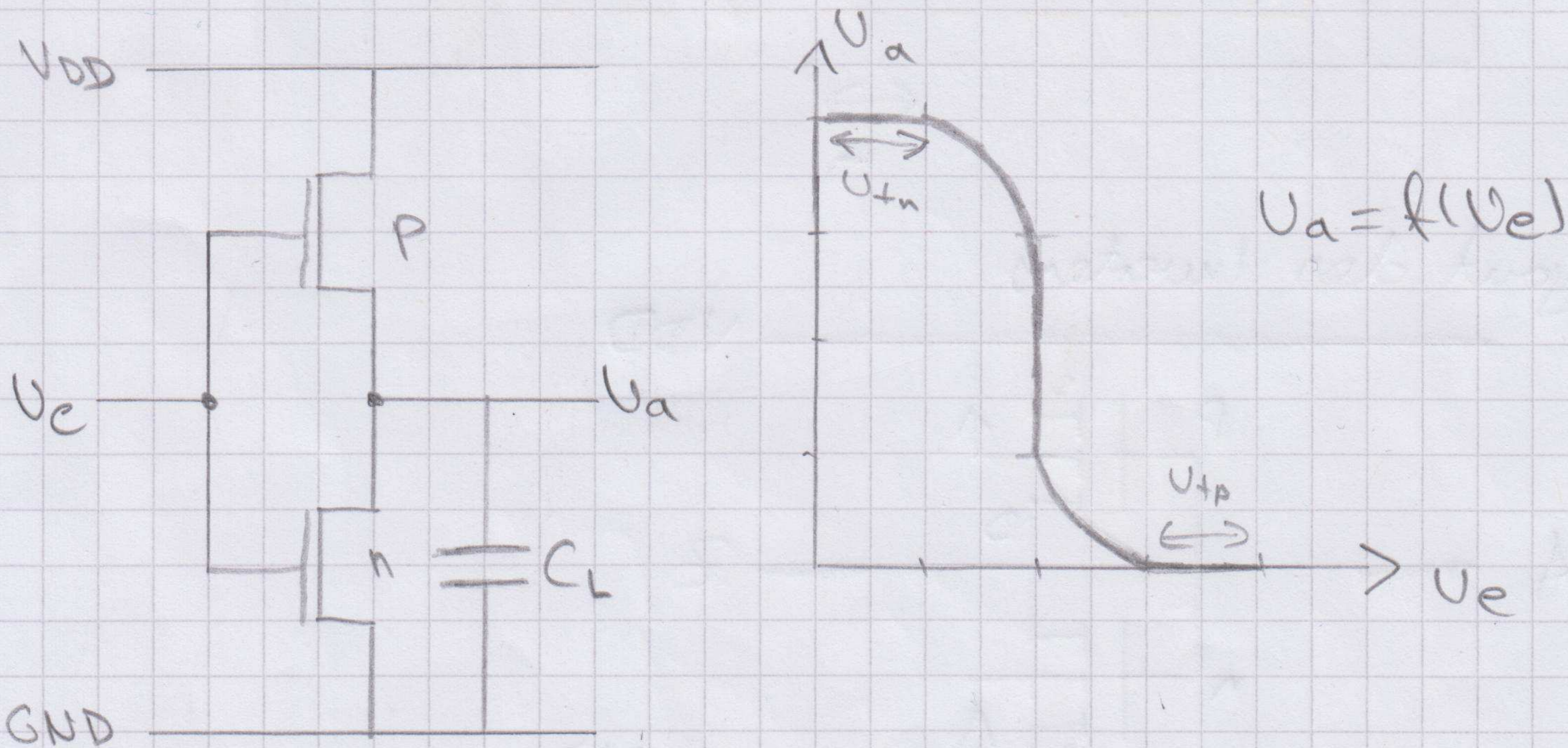
ÜKL:  $I_D = -\frac{\beta}{2} \cdot (U_{GS} - U_{th})^2 \iff U_{GS} = U_{th} - \sqrt{\frac{2 \cdot |I_D|}{\beta}}$   
 für  $\Rightarrow |U_{GS}| \geq |U_{th}|; |U_{DS}| > |U_{Dssat}|$

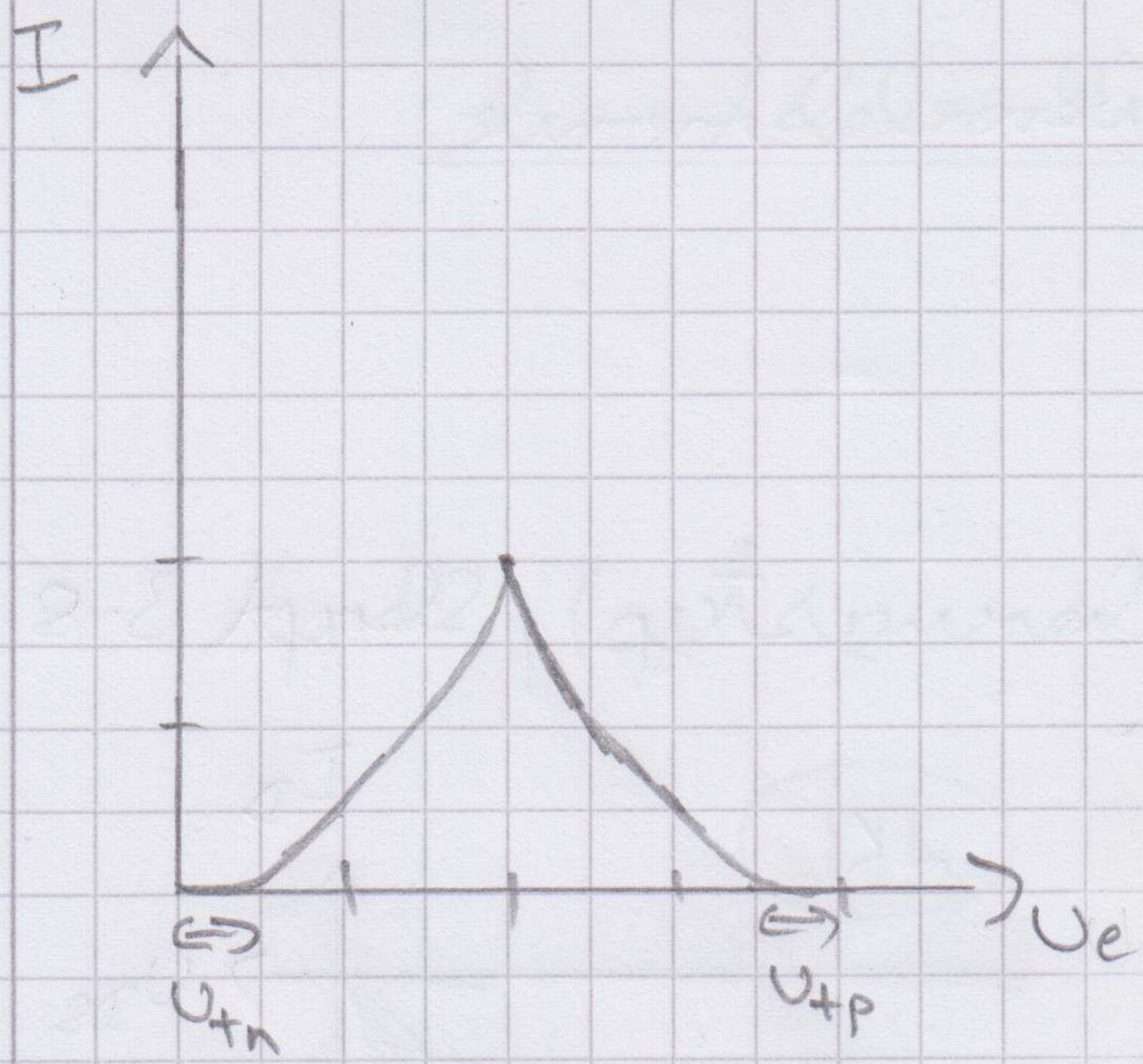
AKL:  $I_D = -\beta \left[ (U_{GS} - U_{th}) \cdot U_{DS} - \frac{U_{DS}^2}{2} \right]$   
 für  $\Rightarrow |U_{GS}| > |U_{th}|; |U_{DS}| < |U_{Dssat}|$

$K_p = \frac{\epsilon_{ox}}{d_{ox}} \cdot \mu_p = \frac{\epsilon_0 \cdot \epsilon_{r,ox} \cdot \mu_p}{d_{ox}}$  (Skript 3-7)

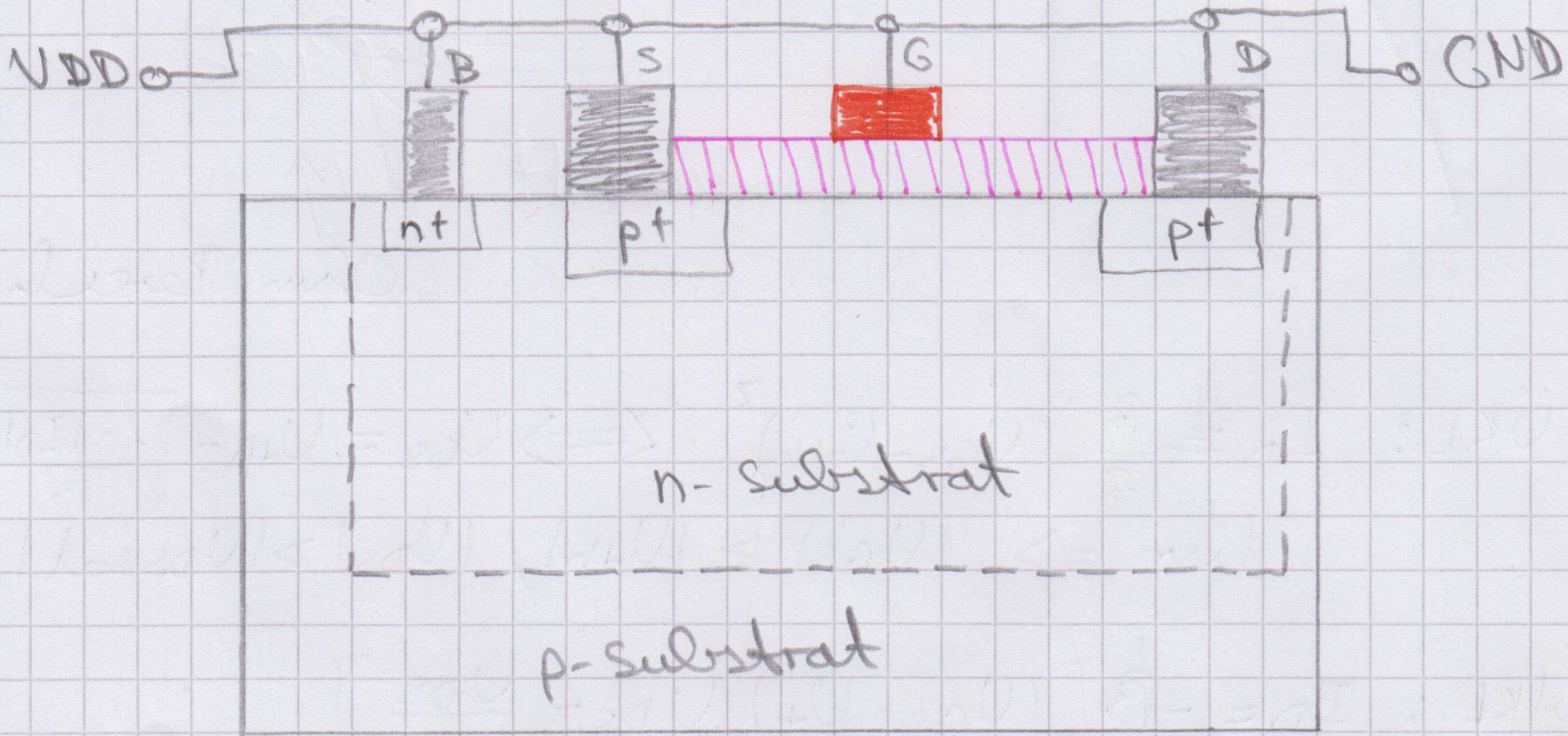
$\beta = K_p \cdot \frac{W}{L}$

→ CMOS-Inverter, Skript 4.3-2 f

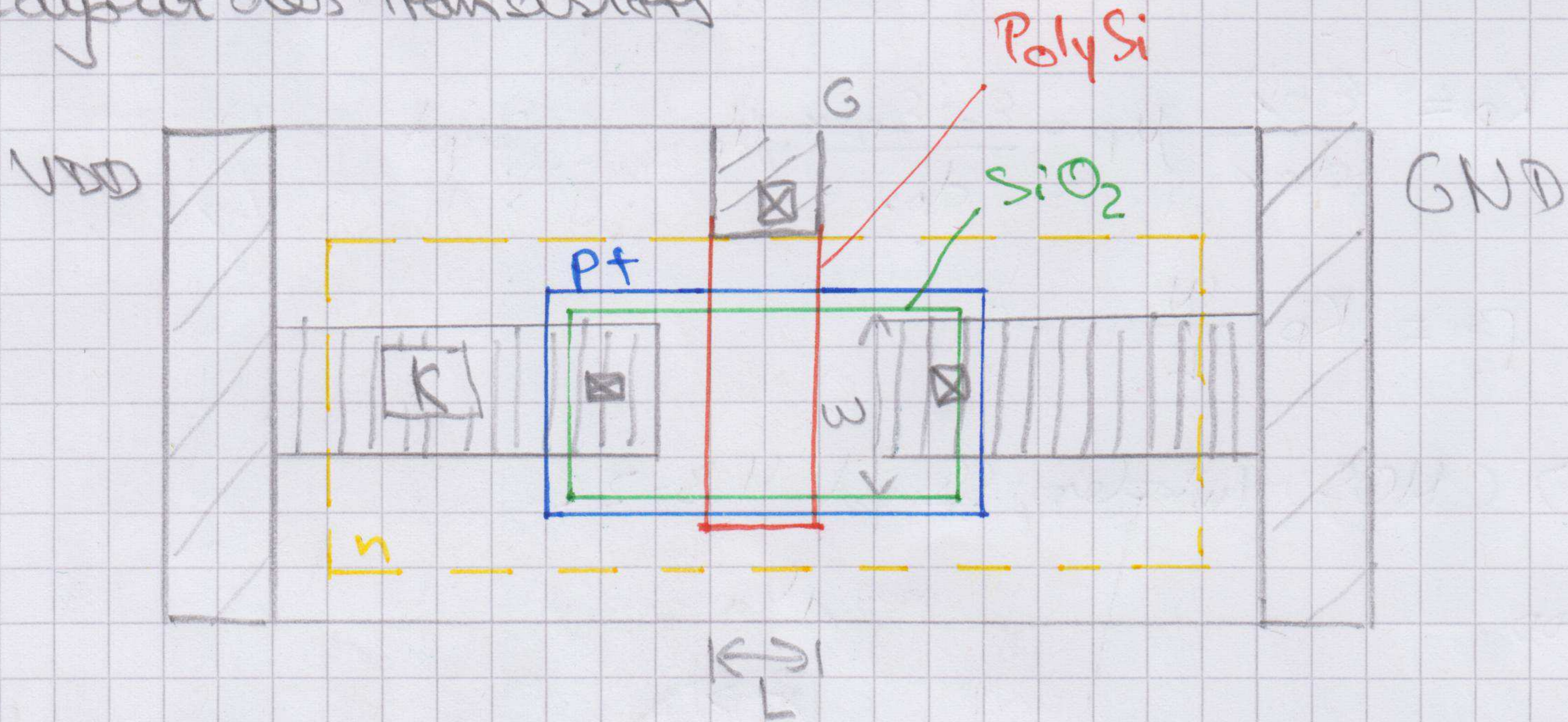




→ Querschnitt von p-Kanal-MOSFET



→ layout des Transistors



→ layout des Inverters

