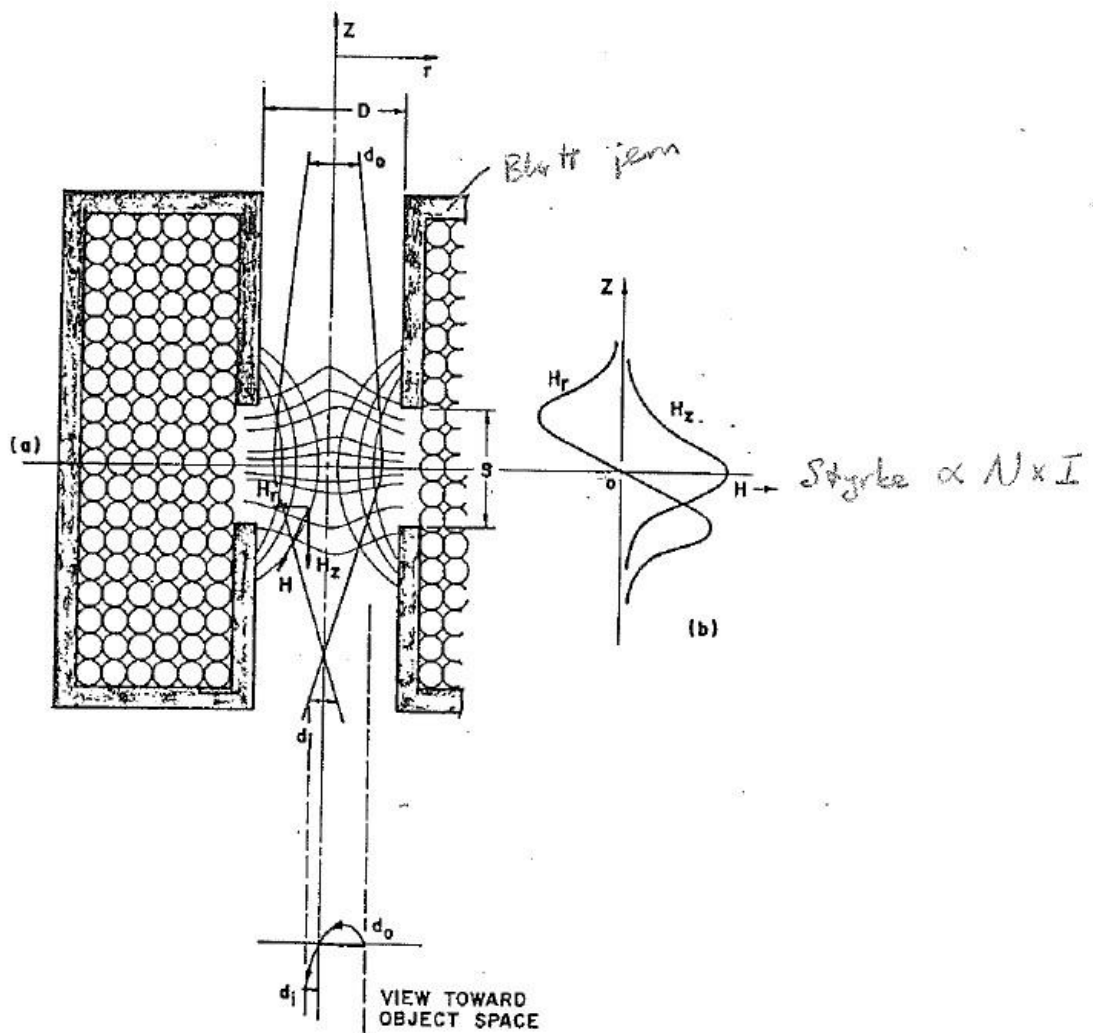
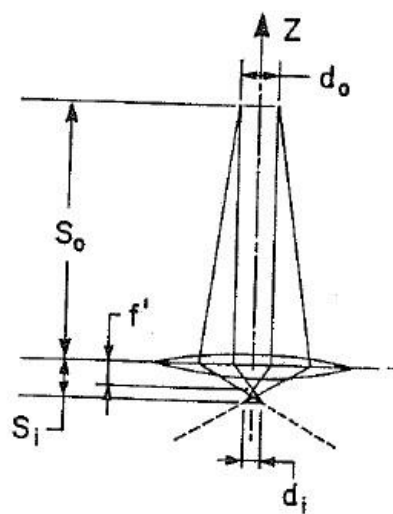


5



a cross-sectional view of an electromagnetic lens with the detailed magnetic field distributions, at any point of the pole-piece, a "composite" magnetic field could be divided as $H(r)$ and $H(z)$

6



$$M = \frac{d_o}{d_i} = \frac{s_o}{s_i}$$

the electromagnetic lens with a shorter focal length could demagnify the beam