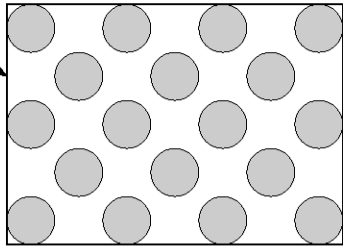


Initial

$$\psi_0 = \frac{1}{\sqrt{V}} e^{i(\mathbf{k}_0 \cdot \mathbf{r} - \omega_0 t)}$$

\mathbf{n}
 $\mathbf{k}_0 \cdot \boldsymbol{\omega}_0$

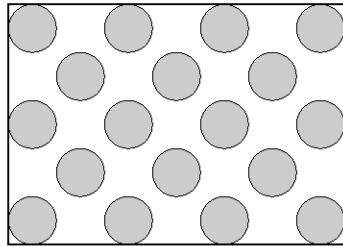


$\phi_0 \quad E_0$

Final

$$\psi_f = \frac{1}{\sqrt{V}} e^{i(\mathbf{k}_f \cdot \mathbf{r} - \omega_f t)}$$

\mathbf{n}
 $\mathbf{k} \cdot \boldsymbol{\omega}$



$\phi_f \quad E_f$