$$\overline{n\Omega\,[NnzL]} + \overline{p\Omega\,[NnzL]} \begin{cases} \Sigma = 0 & \Omega = \Omega_n \pm \Omega_p \\ \Sigma = 1 & \Omega = \Omega_n \mp \Omega_p \end{cases}$$

If $\Omega = L + \frac{1}{2}$ $\uparrow$

If $\Omega = L - \frac{1}{2}$ $\downarrow$

for $\underset{p}{\uparrow}\ \underset{n}{\uparrow}$ or $\underset{p}{\downarrow}\ \underset{n}{\downarrow}$

$\Sigma = 1$ $\quad \Omega = \Omega_n + \Omega_p$

$\Sigma = 0$ $\quad \Omega = \Omega_n - \Omega_p$

for $\underset{p}{\downarrow}\ \underset{n}{\uparrow}$

$\Sigma = 1$ $\quad \Omega = \Omega_n - \Omega_p$

Fig. 3