$$U(h) \propto \quad F_{0,0}\left[\boxed{F_{0,0}F_{h,0}e_{j\pi}^{z_3\zeta}} + .. + \boxed{F_{i,0}F_{h-i,0}e_{j\pi}^{z_2\zeta_1^{(i)}+z_3(\zeta-\zeta_1^{(i)})}} + .. + \boxed{F_{h,0}F_{0,0}e_{j\pi}^{z_2\zeta}} \right]$$

$$+ \quad F_{i,0}\left[\boxed{F_{0,0}F_{h-i,0}e_{j\pi}^{z_1\zeta_1^{(i)}+z_3(\zeta-\zeta_1^{(i)})}} + .. + \boxed{F_{h-i,0}F_{0,0}e_{j\pi}^{z_1\zeta_1^{(h-i)}+z_3(\zeta-\zeta_1^{(h-i)})}} \right] + ..$$

$$+ \quad F_{h-i,0}\left[\boxed{F_{0,0}F_{i,0}e_{j\pi}^{z_1\zeta_1^{(h-i)}+z_2(\zeta-\zeta_1^{(h-i)})}} + .. + \boxed{F_{i,0}F_{0,0}e_{j\pi}^{z_1\zeta_1^{(i)}+z_2(\zeta-\zeta_1^{(i)})}} \right] + ..$$

$$+ \quad F_{h,0}\left[\boxed{F_{0,0}^2 e_{j\pi}^{z_1\zeta}} + F_{j,0}F_{-j,0}e_{j\pi}^{z_1\zeta_1^{(h+j)}+z_2(\zeta-\zeta_1^{(h+j)})} + .. \right]$$

$$= \quad \boxed{F_{0,0}^2 F_{h,0}\left[e_{j\pi}^{z_3\zeta} + e_{j\pi}^{z_2\zeta} + e_{j\pi}^{z_1\zeta} \right]}$$

$$+ \quad \boxed{F_{0,0}\left[\sum_{i\neq 0,h} F_{i,0}F_{h-i}\left\{ e_{j\pi}^{z_2\zeta_1^{(i)}+z_3(\zeta-\zeta_1^{(i)})} e_{j\pi}^{z_1\zeta_1^{(i)}+z_3(\zeta-\zeta_1^{(i)})} e_{j\pi}^{z_1\zeta_1^{(i)}+z_2(\zeta-\zeta_1^{(i)})} \right\} \right]}$$

$$+ \quad \left[\sum_{i\neq 0,h}\sum_{j\neq 0,h-i} F_{i,0}F_{j,0}F_{h-i-j,0}e_{j\pi}^{z_1\zeta_1^{(i)}+z_2(\zeta_2^{(i+j)}-\zeta_1^{(i)})+z_3(\zeta-\zeta_2^{(i+j)})} \right.$$

$$\left. + F_{h,0}\sum_{j\neq 0} F_{j,0}F_{-j,0}e_{j\pi}^{z_1\zeta_1^{(h+j)}+z_2(\zeta-\zeta_1^{(h+j)})} \right]$$

$$= \quad \boxed{F_{0,0}^2 F_{h,0}\sum_m e_{j\pi}^{z_m\zeta}}$$

$$+ \quad \boxed{F_{0,0}\left[\sum_{i\neq 0,h} F_{i,0}F_{h-i}\sum_m\sum_{n>m} e_{j\pi}^{z_m\zeta_1^{(i)}+z_n(\zeta-\zeta_1^{(i)})} \right]}$$

$$+ \quad ..$$