$G_{\delta k}$, $w_f^{\alpha}(n) < \eta \Rightarrow N_0(\Delta_n(t)) > 0$

$G_{\delta k}^1 \cap \{t^* \in \Delta_n^{\varepsilon}(t)\}^1 \cap \{w^*(n) < \eta\}^1$

~~$\Rightarrow N_0(\Delta_n(t)) > 0$~~

$\cap\ G_{\delta k}^2 \cap \{\ \}^2 \cap \{w^*(n) < \eta\}^2 \Bigg\} \Delta$

$\Rightarrow \underbrace{N_0(\Delta_n(t)) > 0,\ M_0(\Delta_n(t) \geq 0)}_{= A}$

~~so $P(A)$~~ $\xrightarrow{\alpha}$

$P(B) = P(G_{\delta k}^1 \cap \{\ \}^1 \cap G_{\delta k}^2 \cap \{\ \}^2)$

$- P(\alpha \cap \{w^*(n) \geq \eta\}^1 \text{ or } \{w^*(n) \geq \eta\}^2)$

$\leq P(w^*(n) \geq \eta)^1 + P(w^*(n) \geq \eta)^2$

which are small