$$\gamma = C\left(\left(\nabla\psi, \psi\right) \wedge \omega^{n-1}\right)$$
$$= \left(-\sum_{I,J,K} (-1)^{K-1} \psi_{I\bar{J}.K} \overline{\psi_{I\bar{J}}}\ \overline{\varphi}_1 \wedge \cdots \wedge \hat{\overline{\varphi}}_K \wedge \cdots \wedge \overline{\varphi}_n\right) \wedge \Phi' + \langle A^{\circ}(\psi), \psi\rangle_{,\ \varphi \cdots) \wedge \Phi}$$

and use $f_{K\bar{K}} = f_{\bar{K}.K} + A'(f)$. to estimate the L^2-norm $\|\nabla\psi\|^2$ of the z-derivatives from below by the Dirichlet norm. Putting together,

$$\|\nabla\psi\|^2 + \|\bar{\nabla}\psi\|^2 + \|\psi\|^2 \leq C''\left(\left(\Delta\psi, \psi\right) + \|\psi\|^2\right) = C''\mathcal{D}(\psi).$$

which is the Garding inequality.

$\boxed{\Gamma}$ From γ, and Weitzenböck formula, we get

$$\langle\Delta\psi, \psi\rangle = \|\nabla\psi\|^2 + \langle A'(\psi), \psi\rangle$$

Again using the inequality $2\alpha\beta \leq \epsilon\alpha^2 + \frac{1}{\epsilon}\beta^2$,

$$\|\nabla\psi\|^2 \leq C'\{(\Delta\psi, \psi) + \|\psi\|^2\}.$$

$\Rightarrow$ Putting together,

$$\|\nabla\psi\|^2 + \|\bar{\nabla}\psi\|^2 + \|\psi\|^2 \leq C''\{(\Delta\psi, \psi) + \|\psi\|^2\}$$
$$\shortparallel$$
$$C''\mathcal{D}(\psi).$$

$d\gamma = \bar{\partial}\eta$, and

$$\psi_{I\bar{J},K,\bar{K}} = \psi_{I\bar{J}.\bar{K}.K} + A'(\psi_{IJ}).$$

Here ∇ is ∇'.

$$|\langle\psi, A'(\psi)\rangle| \leq \|A'(\psi)\|\,\|\psi\|$$