$\Rightarrow \quad \gamma(e_0) = -e_0 + \operatorname{Im}\mu, \quad$ since $\quad \beta((n \oplus e_0) + \operatorname{Im}\mu) = -\eta(e_0)$

$\alpha(n) = (n \oplus 0) + \operatorname{Im}\mu.$

$$\Rightarrow \quad \delta\gamma : \begin{array}{ccc} E_1 & \longrightarrow & E \\ \rotatebox{90}{$\in$} & & \\ e_1 & \longmapsto & -\partial(e_1) + \operatorname{Im}\mu. \end{array}$$

$$\begin{tikzcd} E_1 \arrow[r, "\omega"] \arrow[d, "\delta\gamma"'] & N \arrow[dl, "\alpha"] \\ E & \end{tikzcd}$$

$$E \simeq \frac{N \oplus E_0}{\mu(E_1/\partial E_2)}$$

Define $\omega : E_1 \longrightarrow N$ by

$$e_1 \longmapsto f(e_1).$$

$$\begin{aligned} \Rightarrow \quad \alpha \circ \omega(e_1) = \alpha(f(e_1)) &= (f(e_1) \oplus 0) + \operatorname{Im}\mu \\ &= (f(e_1), 0) + (-f(e_1), -\partial(e_1)) \\ &\quad + \operatorname{Im}\mu = (0, -\partial(e_1)) + \operatorname{Im}\mu \\ &= (\delta\gamma)(e_1). \end{aligned}$$

$\Rightarrow \quad \omega = \partial(1_M) = f$

$\Rightarrow \quad \Phi \circ \psi(f) = f.$

$\Rightarrow \quad \Phi \circ \psi([f]) = [f] \quad \text{- - -} \quad ②$

By ① & ②, $\Phi$ is bijective. $\quad \lrcorner$

Now suppose that $\mathcal{O} = \mathbb{C}\{z_1, z_2\}$ is the local ring in two varicbles and $I = \{f_1, f_2\}$ is a regular