1043-14-89 **Teruo Asanuma*** (asanuma@sci.u-toyama.ac.jp), Faculty of Science University of Toyama, 3190 Gofuku Toyama-shi 930-8555 Japan, Toyama. *Topological aspect of the Jacobian conjecture.*

Let ϕ be a polynomial map of the complex planes $\mathbf{C}^2$ defined by polynomials $f(x,y), g(x,y) \in \mathbf{C}[x,y]$. If we set $t = y/x \in \mathbf{C}(x,y)$, then we have $F(T,X,Y)$ an irreducible polynomial in $\mathbf{C}[T,X,Y] = \mathbf{C}^{[3]}$ defined by $F(t,f,g) = 0$. Given a small real number $0 \le \varepsilon$, a subdomain $D_\varepsilon = \{(t, f(u,tu), g(u,tu)) | t, u \in \mathbf{C}, |t| \le \varepsilon\}$ of the affine hypersurface $V(F) \subset \mathbf{C}^3$ is welldefined. For the proof of the Jacobian conjecture it is enough to prove the case where (1) the highest degree term of f is of the form y^m, and (2) $\mathbf{C}(f,g,t) = \mathbf{C}(x,y)$. Such a pair (f,g) with its Jacobian nonzero constant is called a standard Jacobian pair. We will talk about a topological characterization of D_ε in case of (f,g) a standard Jacobian pair as a graph of the locally homeomorphism ϕ. (Received August 25, 2008)