Identity Atom Lens

$$\frac{}{identity : r \Leftrightarrow r}$$

Iterate Atom Lens

$$\frac{dl : dr_1 \Leftrightarrow dr_2 \qquad dr_1^{!*} \qquad dr_2^{!*}}{iterate(dl) : dr_1^{*} \Leftrightarrow dr_2^{*}}$$

Clause Lens

$$\frac{al_1 : a_{1,1} \Leftrightarrow a_{1,2} \qquad \ldots \qquad l_n : a_{n,1} \Leftrightarrow a_{n,2} \qquad a_{i,j}.!a_{i+1,j}}{([al_1; \ldots; al_n], [s_{1,1}; \ldots; s_{n+1,1}], [s_{1,2}; \ldots; s_{n+1,2}], \sigma) : ([a_{1,1}; \ldots; a_{n,1}], [s_{1,1}; \ldots; s_{n+1,1}]) \Leftrightarrow ([a_{\sigma^{-1}(1),2}; \ldots; a_{\sigma^{-1}(n}$$

DNF Regex Lens

$$\frac{cll_1 : cl_{1,1} \Leftrightarrow cl_{1,2} \qquad \ldots \qquad cll_n : cl_{n,1} \Leftrightarrow cl_{n,2} \qquad cl_i \cap cl_j = \emptyset}{([cll_1; \ldots; cll_n], \sigma) : [cl_{1,1}; \ldots; cl_{n,1}] \Leftrightarrow [cl_{\sigma^{-1}(1),2}; \ldots; cl_{\sigma^{-1}(n),2}]}$$