

es-atom^{11,40}

$i \parallel a$
 $\equiv_{\text{def}} \text{Trans}(i):k:\text{Knd} \rightarrow \text{kindtype}(i;k) \rightarrow \text{es_state}(es;i) \rightarrow \text{es_state}(es;i) \parallel a$
 $\quad \& \text{Send}(i):k:\text{Knd} \rightarrow \text{kindtype}(i;k) \rightarrow \text{state}@i \rightarrow (\text{Msg List}) \parallel a$
 $\quad \& \text{Choose}(i):b:\text{Id} \rightarrow \mathbb{N} \rightarrow \text{state}@i \rightarrow (? \text{kindtype}(i;\text{locl}(b))) \parallel a$

clarification:

$\text{es-atom}(es;i;a)$
 $\equiv_{\text{def}} \text{free-from-atom}\{1\}(k:\text{Knd} \rightarrow \text{es-kindtype}(es;i;k) \rightarrow \text{es_state}(es;i) \rightarrow$
 $\quad \text{es_state}(es;i); \text{es-trans}(es;i); a)$
 $\quad \& \text{free-from-atom}\{1\}(k:\text{Knd} \rightarrow \text{es-kindtype}(es;i;k) \rightarrow \text{es_state}(es;i) \rightarrow$
 $\quad (\text{es-Msg}(es) \text{ List}); \text{es-send}(es;i); a)$
 $\quad \& \text{free-from-atom}\{1\}(b:\text{Id} \rightarrow \mathbb{N} \rightarrow \text{es_state}(es;i) \rightarrow$
 $\quad (\text{es-kindtype}(es;i;\text{locl}(b)) + \text{Unit}); \text{es-choose}(es;i); a)$