

combine-ecl-trans-state1^{0,22}

$$\begin{aligned} & \forall ds:x:\text{Id fp} \rightarrow \text{Type}, da:k:\text{Knd fp} \rightarrow \text{Type}, A, B:\text{ecl-trans-tuple}\{i:l\}(ds;da), \\ & f:(\mathbb{N} \rightarrow \mathbb{B}) \rightarrow (\mathbb{N} \rightarrow \mathbb{B}) \rightarrow \mathbb{N} \rightarrow \mathbb{B}, g:(\mathbb{B} \rightarrow \mathbb{B} \rightarrow \mathbb{B}), L, L_1, l:\text{event-info}(ds;da) \text{ List.} \\ & L = (L_1 @ l) \\ & \Rightarrow (\forall L':\text{event-info}(ds;da) \text{ List.} \\ & \quad L' \leq L \Rightarrow (L_1 \leq L' \Leftrightarrow \text{ecl-trans-h}(A)(0,\text{ecl-trans-state}(A;L')))) \\ & \Rightarrow \text{ecl-trans-state}(\text{combine-ecl-tuples}(A;B;f;g);L) \\ & = \\ & \langle \text{ecl-trans-state}(A;L), \text{ecl-trans-state}(B;l) \rangle \\ & \in \text{ecl-trans-type}(\text{combine-ecl-tuples}(A;B;f;g)) \end{aligned}$$