

## combine-ecl-trans-state0<sup>11,40</sup>

$\forall ds:\text{fpf}(\text{Id}; x.\text{Type}), da:\text{fpf}(\text{Knd}; k.\text{Type}), A,B:\text{ecl-trans-tuple}\{i:l\}(ds; da),$   
 $f:(\mathbb{N} \rightarrow \mathbb{B}) \rightarrow (\mathbb{N} \rightarrow \mathbb{B}) \rightarrow \mathbb{N} \rightarrow \mathbb{B}, g:(\mathbb{B} \rightarrow \mathbb{B} \rightarrow \mathbb{B}), L:(\text{event-info}(ds; da) \text{ List}).$   
 $(\forall L':(\text{event-info}(ds; da) \text{ List}).$   
 $\text{iseg}(\text{event-info}(ds; da); L'; L)$   
 $\Rightarrow (\uparrow(\text{ecl-trans-h}(A)(0, \text{ecl-trans-state}(A; L'))))$   
 $\Rightarrow (L' = L)$   
 $\Rightarrow (\text{ecl-trans-state}(\text{combine-ecl-tuples}(A; B; f; g); L)$   
 $=$   
 $\langle \text{ecl-trans-state}(A; L), \text{ecl-trans-state}(B; []) \rangle$   
 $\in \text{ecl-trans-type}(\text{combine-ecl-tuples}(A; B; f; g)))$