

## ecl-reset-halt<sup>11,40</sup>

$$\begin{aligned} & \forall ds:\text{fpf}(\text{Id}; x.\text{Type}), da:\text{fpf}(\text{Knd}; k.\text{Type}), a:\text{ecl}(ds; da), v:\text{ecl-trans-tuple}\{i:1\}(ds; da), \\ & \quad L:(\text{event-info}(ds; da) \text{ List}). \\ & (\forall L:(\text{event-info}(ds; da) \text{ List}). \\ & (\text{ecl-trans-normal}(v) \\ & \wedge (\forall n:\mathbb{N}^+. (\text{ecl-trans-halt2}(ds; da; v)(n, L)) \Rightarrow (n \in \text{ecl-trans-es}(v)))) \\ & \wedge (\forall n:\mathbb{N}. \\ & \quad (\exists L':\text{event-info}(ds; da) \text{ List} \\ & \quad \quad (\text{iseg}(\text{event-info}(ds; da); L'; L) \wedge (\text{ecl-halt}(ds; da; a)(n, L')))) \\ & \quad \iff (\text{ecl-trans-halt2}(ds; da; v)(n, L))) \\ & \wedge (\forall m:\mathbb{N}. (\text{ecl-act}(ds; da; m; a)(L) \iff (\text{ecl-trans-act}(ds; da; v)(m, L)))) \\ & \Rightarrow (\forall n:\mathbb{N}. \\ & \quad (\exists L':\text{event-info}(ds; da) \text{ List} \\ & \quad \quad (\text{iseg}(\text{event-info}(ds; da); L'; L) \\ & \quad \quad \wedge (0 < n) \\ & \quad \quad \wedge (\text{star-append}(\text{event-info}(ds; da); (\text{ecl-halt}(ds; da; a)(0)); (\text{ecl-halt}(ds; da; a)(n))) \\ & \quad \quad \quad (L')))) \\ & \quad \iff (\text{ecl-trans-halt2}(ds; da; \text{reset-ecl-tuple}(v))(n, L))) \end{aligned}$$