

## ecl-trans-act\_functionality<sup>11,40</sup>

$\forall ds:\text{fpf}(\text{Id}; x.\text{Type}), da:\text{fpf}(\text{Knd}; k.\text{Type}), A,B:\text{ecl-trans-tuple}\{i:l\}(ds; da), m:\mathbb{N},$

$L:(\text{event-info}(ds; da) \text{ List}), z:\text{event-info}(ds; da).$

$\text{spreadn}(A;$

$Ta,ksa,ia,ga,ha,aa,ea.\text{spreadn}(B;$

$Tb,ksb,ib,gb,hb,ab,eb.((Ta = Tb \in \text{Type})$

$c \wedge ((ksa = ksb \in (\text{Knd List})) \wedge (ia = ib \in Ta))$

$c \wedge ((aa$

$=$

$ab$

$\in \mathbb{N} \rightarrow (k:\{k:\text{Knd} \mid (k \in ksa)\} \rightarrow \text{decl-state}(ds) \rightarrow$

$\text{ma-valtype}(da; k) \rightarrow Ta \rightarrow \mathbb{B}))$

$\wedge (\forall L':(\text{event-info}(ds; da) \text{ List}), k:\{k:\text{Knd} \mid$

$(k \in ksa)\},$

$s:\text{decl-state}(ds), v:\text{ma-valtype}(da; k).$

$\text{iseg}(\text{event-info}(ds; da);$

$\text{append}(L'; \text{cons}(\langle k, s, v \rangle; []));$

$L)$

$\Rightarrow (gb(k,s,v,\text{ecl-trans-state}(A; L'))$

$=$

$ga(k,s,v,\text{ecl-trans-state}(A; L'))$

$\in Ta))))))$

$\Rightarrow (\text{ecl-trans-act}(ds; da; A)(m,\text{append}(L; \text{cons}(z; []))))$

$\Rightarrow (\text{ecl-trans-act}(ds; da; B)(m,\text{append}(L; \text{cons}(z; []))))$