

sends-p-es-sends-iff^{11,40}

$\forall ds:\text{fpf}(\text{Id}; x.\text{Type}), da:\text{fpf}(\text{Knd}; k.\text{Type}), l:\text{IdLnk}, tgs:(\text{Id List}), ks:(\text{Knd List}),$
 $g:(k:\{k:\text{Knd} \mid (k \in ks)\} \rightarrow (tg:\{tg:\text{Id} \mid (tg \in tgs)\}$
 $\times (\text{decl-state}(ds) \rightarrow \text{ma-valtype}(da; k) \rightarrow$
 $(\text{fpf-cap}(da; \text{Kind-deq}; \text{rcv}(l, tg); \text{void}) \text{List}))) \text{List}).$
 $\text{no_repeats}(\text{Id}; tgs)$
 $\Rightarrow \text{L.all}(tgs; \text{Id}; tg.(\uparrow \text{fpf-dom}(\text{Kind-deq}; \text{rcv}(l, tg); da)))$
 $\Rightarrow (\forall es:\text{event_system}\{i:l\}.$
 $(\text{L.all}(ks;$
 $\quad \text{Knd};$
 $\quad k.\text{sends-p}(es; ds; k; \text{fpf-cap}(da; \text{Kind-deq}; k; \text{void}); l; \text{es-dt}(l; da); (g(k))))$
 $\wedge \text{L.all}(tgs; \text{Id}; tg.\text{sframe-p}(es; l; tg; ks)))$
 $\Rightarrow \text{es-decls}(es; \text{source}(l); ds; da)$
 $\Rightarrow \text{with decls } ds$
 $\quad da$
 $\quad \text{sends on } l \text{ from } e$
 $\quad \text{include if deq-member}(\text{Kind-deq}; \text{es-kind}(es; e); ks)$
 $\quad \quad \text{then tagged-list-messages}(\text{es-state-when}(es; e);$
 $\quad \quad \quad \text{es-val}(es; e);$
 $\quad \quad \quad (g(\text{es-kind}(es; e))))$
 $\quad \quad \text{else } []$
 $\quad \text{fi}$
 $\text{and only these for tags in } tgs)$