

## better-sends\_wf<sup>0,22</sup>

$\forall E:\text{Type}, dE:\text{EqDecider}(E), dL:\text{EqDecider}(\text{IdLnk}), V:(\text{Knd} \rightarrow \text{Id} \rightarrow \text{Type}), \text{pred?}:(E \rightarrow (E + \text{Unit})),$   
 $\text{info}:(E \rightarrow (\text{Id} \times \text{Id} + (\text{IdLnk} \times E) \times \text{Id})), \text{val}:(e:E \rightarrow V(\text{kind}(e), \text{loc}(e))),$   
 $p:(\forall e:E, l:\text{IdLnk}.$   
     $\exists e':E.$   
     $\forall e'':E.$   
     $\text{rcv?}(e'')$   
     $\Rightarrow \text{sender}(e'') = e$   
     $\Rightarrow \text{link}(e'') = l$   
     $\Rightarrow e'' = e' \vee e'' < e' \ \& \ \text{loc}(e') = \text{destination}(l) \in \text{Id}, e:E, l:\text{IdLnk}.$   
 $\text{SWellFounded}(\neg \text{first}(y) \ \& \ x = \text{pred}(y) \in E)$   
 $\Rightarrow \text{sends}(dE; dL; \text{pred?}; \text{info}; \text{val}; p; e; l) \in \text{Msg\_sub}(l; \lambda l, tg. V(\text{rcv}(l, tg), \text{destination}(l))) \text{ List}$