

usends1-p^{0,22}

usends1-p($es; ds; k; T; l; tg; B; f$)
 \equiv_{def} ($\forall x:\text{Id. vartype}(\text{source}(l); x) \subseteq \rho \text{ ds}(x)?\text{Top}$)
& $\forall e@\text{source}(l). \text{kind}(e) = k \Rightarrow \text{valtype}(e) \subseteq \rho T$
& ($\forall e:\text{E. kind}(e) = \text{rcv}(l, tg) \Rightarrow \text{valtype}(e) \subseteq \rho B$)
& $\forall e@\text{source}(l).$
 $\text{kind}(e) = k$
 $\Rightarrow (\exists e':\text{E.}$
 $\text{kind}(e') = \text{rcv}(l, tg)$
 & $\text{sender}(e') = e$
 & ($\forall e'':\text{E. kind}(e'') = \text{rcv}(l, tg) \Rightarrow \text{sender}(e'') = e \Rightarrow e'' = e'$)
 & $\text{val}(e') = f(\text{state when } e, \text{val}(e))$)

clarification:

usends1-p($es; ds; k; T; l; tg; B; f$)
 \equiv_{def} ($\forall x:\text{Id. es-vartype}(es; \text{source}(l); x) \subseteq \rho \text{ fpf-cap}(ds; \text{IdDeq}; x; \text{Top})$)
& $\text{alle-at}(es; \text{source}(l); e. \text{es-kind}(es; e) = k \in \text{Knd} \Rightarrow \text{es-valtype}(es; e) \subseteq \rho T)$
& ($\forall e:\text{es-E}(es). \text{es-kind}(es; e) = \text{rcv}(l, tg) \in \text{Knd} \Rightarrow \text{es-valtype}(es; e) \subseteq \rho B$)
& $\text{alle-at}(es; \text{source}(l); e. \text{es-kind}(es; e) = k \in \text{Knd}$
 $\Rightarrow (\exists e':\text{es-E}(es).$
 $\text{es-kind}(es; e') = \text{rcv}(l, tg) \in \text{Knd}$
 & $\text{es-sender}(es; e') = e \in \text{es-E}(es)$
 & ($\forall e'':\text{es-E}(es).$
 $\text{es-kind}(es; e'') = \text{rcv}(l, tg) \in \text{Knd}$
 $\Rightarrow \text{es-sender}(es; e'') = e \in \text{es-E}(es)$
 $\Rightarrow e'' = e' \in \text{es-E}(es)$)
 & $\text{es-val}(es; e')$
 $=$
 $f(\text{es-state-when}(es; e), \text{es-val}(es; e))$
 $\in B)$)