es-only-sender[11,40]

only $k(v)$:B sends $[tg,f(s;v)] : T$ on l
$\equiv_{\text{def}}$ $(\forall e$:E.
$(\text{loc}(e) = \text{source}(l))$
$\Rightarrow (\text{kind}(e) = k)$
$\Rightarrow (\exists e'$:E. $((\text{kind}(e') = \text{rcv}(l,tg))$ c$\wedge$ $(\text{sender}(e') = e))))$
& $(\forall e'$:E.
$(\text{kind}(e') = \text{rcv}(l,tg))$
$\Rightarrow ((\text{kind}(\text{sender}(e')) = k)$
c$\wedge$ $(\text{valtype}(\text{sender}(e')) \subseteq\text{r } B)$
c$\wedge$ $(\text{valtype}(e') \subseteq\text{r } T)$
c$\wedge$ $(\text{val}(e') = f((\text{state when sender}(e'));\text{val}(\text{sender}(e')))$
& $(\forall e''$:E.
$(\text{kind}(e'') = \text{rcv}(l,tg)) \Rightarrow (\text{sender}(e'') = \text{sender}(e')) \Rightarrow (e'' = e'))))$

clarification:

es-only-sender(es; k; B; l; tg; T; s,v.$f(s;v)$)
$\equiv_{\text{def}}$ $(\forall e$:es-E(es).
$(\text{es-loc}(es;\ e) = \text{source}(l) \in \text{Id})$
$\Rightarrow (\text{es-kind}(es;\ e) = k \in \text{Knd})$
$\Rightarrow (\exists e'$:es-E(es)
$((\text{es-kind}(es;\ e') = \text{rcv}(l,tg) \in \text{Knd})$ c$\wedge$ $(\text{es-sender}(es;\ e') = e \in \text{es-E}(es)))))$
& $(\forall e'$:es-E(es).
$(\text{es-kind}(es;\ e') = \text{rcv}(l,tg) \in \text{Knd})$
$\Rightarrow ((\text{es-kind}(es;\ \text{es-sender}(es;\ e')) = k \in \text{Knd})$
c$\wedge$ $(\text{es-valtype}(es;\ \text{es-sender}(es;\ e')) \subseteq\text{r } B)$
c$\wedge$ $(\text{es-valtype}(es;\ e') \subseteq\text{r } T)$
c$\wedge$ $(\text{es-val}(es;\ e')$
$=$
$f(\text{es-state-when}(es;\text{es-sender}(es;\ e'));\text{es-val}(es;\ \text{es-sender}(es;\ e')))$
$\in T$
& $(\forall e''$:es-E(es).
$(\text{es-kind}(es;\ e'') = \text{rcv}(l,tg) \in \text{Knd})$
$\Rightarrow (\text{es-sender}(es;\ e'') = \text{es-sender}(es;\ e') \in \text{es-E}(es))$
$\Rightarrow (e'' = e' \in \text{es-E}(es))))))$

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http://www.nuprl.org/FDLcontent/p0_963683_/p61_276876_{es-only-sender}.html