conditional-send1-p[11,40]

k(v:B) sends
 f(x:A,v) on
 l tagged with tg:T
 provided c(x,v)
$\equiv_{\text{def}}$ ((vartype(source(l);x) $\subseteq$r A)
 & ($\forall e$:E. (loc(e) = source(l)) $\Rightarrow$ (kind(e) = k) $\Rightarrow$ (valtype(e) $\subseteq$r B))
 & ($\forall e$:E. (kind(e) = rcv(l,tg)) $\Rightarrow$ (valtype(e) $\subseteq$r T)))
 c$\wedge$ ($\forall e$:E.
 (loc(e) = source(l))
 $\Rightarrow$ (kind(e) = k)
 $\Rightarrow$ (((↑(c((x when e),val(e))))
 $\Rightarrow$ ($\exists e'$:E
 ((kind(e') = rcv(l,tg))
 c$\wedge$ (sender(e') = e
 & ($\forall e''$:E.
 (kind(e'') = rcv(l,tg)) $\Rightarrow$ (sender(e'') = e) $\Rightarrow$ (e'' = e'))
 & val(e') = f((x when e),val(e))))))
 & ((¬(↑(c((x when e),val(e)))))
 $\Rightarrow$ (¬($\exists e'$:E. ((kind(e') = rcv(l,tg)) c$\wedge$ (sender(e') = e)))))))

clarification:

conditional-send1-p(es;x;A;k;B;l;tg;T;c;f)
$\equiv_{\text{def}}$ ((es-vartype(es; source(l); x) $\subseteq$r A)
 & ($\forall e$:es-E(es).
 (es-loc(es; e) = source(l) $\in$ Id)
 $\Rightarrow$ (es-kind(es; e) = k $\in$ Knd)
 $\Rightarrow$ (es-valtype(es; e) $\subseteq$r B))
 & ($\forall e$:es-E(es). (es-kind(es; e) = rcv(l,tg) $\in$ Knd) $\Rightarrow$ (es-valtype(es; e) $\subseteq$r T)))
 c$\wedge$ ($\forall e$:es-E(es).
 (es-loc(es; e) = source(l) $\in$ Id)
 $\Rightarrow$ (es-kind(es; e) = k $\in$ Knd)
 $\Rightarrow$ (((↑(c(es-when(es; x; e),es-val(es; e))))
 $\Rightarrow$ ($\exists e'$:es-E(es)
 ((es-kind(es; e') = rcv(l,tg) $\in$ Knd)
 c$\wedge$ (es-sender(es; e') = e $\in$ es-E(es)
 & ($\forall e''$:es-E(es).
 (es-kind(es; e'') = rcv(l,tg) $\in$ Knd)
 $\Rightarrow$ (es-sender(es; e'') = e $\in$ es-E(es))
 $\Rightarrow$ (e'' = e' $\in$ es-E(es)))
 & es-val(es; e') = f(es-when(es; x; e),es-val(es; e)) $\in$ T))))
 & ((¬(↑(c(es-when(es; x; e),es-val(es; e)))))

$\Rightarrow$ ($\neg$($\exists e'$:es-E(es)
((es-kind(es; e') = rcv(l,tg) $\in$ Knd)
c$\wedge$ (es-sender(es; e') = $e \in$ es-E(es)))))))

http://www.nuprl.org/FDLcontent/p0_963683_/p37_726951_{conditional-send1-p}.html