w-machine-independent[11,40]

w-machine-independent(w;i;k;x)
$\equiv_{\text{def}}$ let $Choose, Trans, Send$ = w-machine(w;i) in
$\forall s_1$, s_2:(x:Id$\rightarrow \mathbb{Q} \rightarrow$vartype($i$;$x$)).
($\forall z$:Id. ($\neg(z = x)$) $\Rightarrow$ ($s_1(z) = s_2(z)$))
$\Rightarrow$ (($\forall v$:w-kindtype(w.TA(i);w.M;i)(k).
($\forall z$:Id. ($\neg(z = x)$) $\Rightarrow$ ($Trans(k,v,s_1,z) = Trans(k,v,s_2,z)$))
& $Send(k,v,\lambda x.s_1(x,0)) = Send(k,v,\lambda x.s_2(x,0))$)
& (($\uparrow$islocal(k))
$\Rightarrow$ ($\forall n$:$\mathbb{N}$. $Choose$(act(k),n,$\lambda x.s_1(x,0)$) = $Choose$(act(k),n,$\lambda x.s_2(x,0)$)))))

clarification:

w-machine-independent(w;i;k;x)
$\equiv_{\text{def}}$ let $Choose, Trans, Send$ = w-machine(w;i) in
$\forall s_1$:(x:Id$\rightarrow \mathbb{Q} \rightarrow$w-vartype($w$; i; x)), s_2:(x:Id$\rightarrow \mathbb{Q} \rightarrow$w-vartype($w$; i; x)).
($\forall z$:Id. ($\neg(z = x \in \text{Id})$) $\Rightarrow$ ($s_1(z) = s_2(z) \in \mathbb{Q} \rightarrow$w-vartype($w$; i; z)))
$\Rightarrow$ (($\forall v$:w-kindtype(w.TA(i);w.M;i)(k).
($\forall z$:Id.
($\neg(z = x \in \text{Id})$) $\Rightarrow$ ($Trans(k,v,s_1,z) = Trans(k,v,s_2,z) \in \mathbb{Q} \rightarrow$w-vartype($w$; i; z)))
& $Send(k,v,\lambda x.s_1(x,0)) = Send(k,v,\lambda x.s_2(x,0)) \in$ (w-Msg(w) List))
& (($\uparrow$islocal(k))
$\Rightarrow$ ($\forall n$:$\mathbb{N}$.
$Choose$(act(k),n,$\lambda x.s_1(x,0)$)
=
$Choose$(act(k),n,$\lambda x.s_2(x,0)$)
$\in$ ((w-kindtype(w.TA(i);w.M;i)(k)) + Unit))))

http://www.nuprl.org/FDLcontent/p0_963683_/p75_332180_{w-machine-independent}.html