

split_tail^{4,23}

$\text{split_tail}(L \mid \forall x.f(x))$

\equiv_{def} Case of L

$\text{nil} \rightarrow \langle \text{nil}, \text{nil} \rangle$

$a.as, \text{rec:} \rightarrow \text{split_tail}(as \mid \forall x.f(x))/hs, \text{ftail}.$

Case of hs

$\text{nil} \rightarrow \text{if } f(a) \rightarrow \langle \text{nil}, a.\text{ftail} \rangle \text{ else } \langle [a], \text{ftail} \rangle \text{ fi}$

$x.y, \text{rec:} \rightarrow \langle a.hs, \text{ftail} \rangle$

(recursive)

clarification:

$\text{split_tail}(L \mid \forall x.f(x))$

\equiv_{def} Case of L

$\text{nil} \rightarrow \langle \text{nil}, \text{nil} \rangle$

$a.as, \text{rec:} \rightarrow \text{split_tail}(as \mid \forall x.f(x))/hs, \text{ftail}.$

Case of hs

$\text{nil} \rightarrow \text{if } f(a) \rightarrow \langle \text{nil}, a.\text{ftail} \rangle \text{ else } \langle a.\text{nil}, \text{ftail} \rangle \text{ fi}$

$x.y, \text{rec:} \rightarrow \langle a.hs, \text{ftail} \rangle$

(recursive)