

do-apply-p-first^{11,40}

$\forall A, B:\text{Type}, L:((A \rightarrow (B + \text{Top})) \text{ List}), x:A.$

$(\uparrow \text{can-apply}(\text{p-first}(L);x))$

$\Rightarrow (\text{do-apply}(\text{p-first}(L);x) = \text{do-apply}(\text{hd}(\text{filter}(\lambda f.\text{can-apply}(f;x);L));x) \in B)$