

p-inject^{11,40}

p-inject($A;B;f$)

$\equiv_{\text{def}} \forall x, y:A.$

$(\uparrow\text{can-apply}(f;x)) \Rightarrow (\uparrow\text{can-apply}(f;y)) \Rightarrow (\text{do-apply}(f;x) = \text{do-apply}(f;y)) \Rightarrow (x = y)$

clarification:

p-inject($A;B;f$)

$\equiv_{\text{def}} \forall x:A, y:A.$

$(\uparrow\text{can-apply}(f;x))$

$\Rightarrow (\uparrow\text{can-apply}(f;y))$

$\Rightarrow (\text{do-apply}(f;x) = \text{do-apply}(f;y) \in B)$

$\Rightarrow (x = y \in A)$