

Inference at * 2
of proof for Lemma p-fun-exp-injection:

....upcase.... NILNIL

1. $A : \text{Type}$
2. $f : A \rightarrow (A + \text{Top})$
3. $\text{p-inject}(A;A;f)$
4. $n : \mathbb{Z}$
5. $0 < n$
6. $\text{p-inject}(A;A;f^{\wedge} n - 1)$

$\vdash \text{p-inject}(A;A;f^{\wedge} n)$
by ((Unfold 'p-fun-exp' (0)·)
CollapseTHEN (((RecUnfold 'primrec' 0)
CollapseTHEN (
(((if (0) =0 then SplitOnConclITE else SplitOnHypITE (0))·)
CollapseTHENA (Auto·))·)

CollapseTHEN (((Try ((Complete (Auto'))·))·)
CollapseTHEN (((Fold 'p-fun-exp' 0)

CollapseTHEN (((Reduce 0)
CollapseTHEN (((BLemma 'p-compose-inject')
CollapseTHEN (
Auto·))·))·))·))·))·))·

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