

Inference at \* 1 1 1 1 2  
of proof for Lemma inv\_image\_ind\_tp:

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1. T : Type
2. r : T → T → ℙ
3. S : Type
4. f : S → T
5. WellFnd{i}(T;x,y.r(x,y))
6. P : S → ℙ
7. ∀j:S. (∀k:S. r(f(k),f(j)) ⇒ P(k)) ⇒ P(j)
8. n : S
9. ∀x:T, n:S. (f(n) = x) ⇒ P(n)
⊢ P(n)
  by (λp.let y = get_var_arg 'n' p
      in let r = get_term_arg 'f' p
      in
      ((((((
DTerm (mk_apply_term r (mvt y)) (-1))
CollapseTHENM (((DTerm (mvt y) (-1))

      CollapseTHENA (Declaration))))))·)
CollapseTHENM (D (-1))))·)
CollapseTHENM (
  Hypothesis))· p)

1: .....wf..... NILNIL

      8. n : S
      ⊢ f(n) ∈ T
2: .....antecedent..... NILNIL

      8. n : S
      ⊢ f(n) = f(n)
.

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