Inference at $*$ 1 1
 of proof for Lemma inv_image_ind_tp:

1. T : Type
2. r : $T \to T \to \mathbb{P}$
3. S : Type
4. f : $S \to T$
5. WellFnd{i}(T;x,y.$r(x,y)$)

$\vdash \forall P{:}(S \to \mathbb{P}).\ (\forall j{:}S.\ (\forall k{:}S.\ r(f(k),f(j)) \Rightarrow P(k)) \Rightarrow P(j)) \Rightarrow \{\forall n{:}S.\ P(n)\}$

 by ((((Unfold ‘guard‘ 0)
 CollapseTHEN (UnivCD))·)
 CollapseTHENA (
  (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

  1:

   6. P : $S \to \mathbb{P}$
   7. $\forall j{:}S.\ (\forall k{:}S.\ r(f(k),f(j)) \Rightarrow P(k)) \Rightarrow P(j)$
   8. n : S
   $\vdash P(n)$

  .