

Inference at * 1 1
of proof for Lemma inv_image_ind_a:

```

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
⊢ P(n)
  by ((% Switch quantification to T %
Assert ∀x:T, y:S. (f(y) = x) ⇒ P(y))

```

```

  CollapseTHEN (IfLabL
[‘assertion’,(D 0)
CollapseTHENA ((Auto_aux (first_nat 1:n
) ((first_nat 1:n),(first_nat 4:n)) (first_tok :t) inil_term)))·
;‘main’,((InstHyp [
f(n);n] (-1))
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term)))·]]).

```

1:

```

9. x : T
⊢ ∀y:S. (f(y) = x) ⇒ P(y)
.

```