

Inference at * 1
of proof for Lemma inv_image_ind_a:

1. $T : \text{Type}$
2. $r : T \rightarrow T \rightarrow \mathbb{P}$
3. $S : \text{Type}$
4. $f : S \rightarrow T$
5. $\text{WellFnd}\{i\}(T;x,y.r(x,y))$
 $\vdash \text{WellFnd}\{i\}(S;x,y.r(f(x),f(y)))$
by (((RepUnfolds “wellfounded guard“ 0)
CollapseTHEN (RepD)).)
CollapseTHEN (

1:

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