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

1. T_1 : Type
2. T_2 : Type
3. r_1 : $T_1 \rightarrow T_1 \rightarrow \mathbb{P}$
4. r_2 : $T_2 \rightarrow T_2 \rightarrow \mathbb{P}$
5. $T_1 = T_2$
6. $\forall x, y{:}T_1.\ r_1(x,y) \iff r_2(x,y)$

$\vdash$WellFnd{i}(T_1;x,y.$r_1(x,y)$) $\Rightarrow$ WellFnd{i}(T_2;x,y.$r_2(x,y)$)
 by ((BackThruLemma ‘wellfounded_functionality_wrt_implies‘)
 CollapseTHENA (
  (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1:

$\vdash T_1 = T_2$

2:

$\vdash \forall x, y{:}T_1.\ \{r_1(x,y) \Leftarrow r_2(x,y)\}$

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