Inference at $*$
of proof for Lemma wellfounded_functionality_wrt_iff:

$\vdash \forall T_1,T_2$:Type, r_1:($T_1 \to T_1 \to \mathbb{P}$), r_2:($T_2 \to T_2 \to \mathbb{P}$).
($T_1 = T_2$)
$\Rightarrow$ ($\forall x,y$:T_1. $r_1(x,y) \iff r_2(x,y)$)
$\Rightarrow$ (WellFnd{i}(T_1;x,y.$r_1(x,y)$) $\iff$ WellFnd{i}(T_2;x,y.$r_2(x,y)$))
by ((UnivCD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term)))·

1:

1. T_1 : Type
2. T_2 : Type
3. r_1 : $T_1 \to T_1 \to \mathbb{P}$
4. r_2 : $T_2 \to T_2 \to \mathbb{P}$
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.$r_1(x,y)$) $\iff$ WellFnd{i}(T_2;x,y.$r_2(x,y)$)

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http://www.nuprl.org/FDLcontent/p0_359040_/p121_96059_{wellfounded_functionality_wrt_iff}.html