Inference at $*$
of proof for Lemma linorder_functionality_wrt_iff:

$\vdash \forall T$:Type, R, R':($T \to T \to \mathbb{P}$).
($\forall x$, y:T. $R(x,y) \iff R'(x,y)$) $\Rightarrow$ (Linorder(T;x,y.$R(x,y)$) $\iff$ Linorder(T;x,y.$R'(x,y)$))
by ((((RepD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term)))·)
CollapseTHEN (Unfold ‘linorder‘ 0))·

1:

1. T : Type
2. R : $T \to T \to \mathbb{P}$
3. R' : $T \to T \to \mathbb{P}$
4. $\forall x$, y:T. $R(x,y) \iff R'(x,y)$

$\vdash$ (Order(T;x,y.$R(x,y)$) & Connex(T;x,y.$R(x,y)$))
$\iff$ (Order(T;x,y.$R'(x,y)$) & Connex(T;x,y.$R'(x,y)$))

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