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

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

$\vdash (\forall a, b, c{:}T.\ R'(b,a) \Rightarrow R'(c,b) \Rightarrow R'(c,a))$
 $\iff (\forall a, b, c{:}T.\ R'(b,a) \Rightarrow R'(c,b) \Rightarrow R'(c,a))$
 by ((Fold ‘trans‘ 0)
 CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
 ),(first_nat 3:n)) (first_tok :t) inil_term)))·

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_82113_{trans_functionality_wrt_iff}1_1.html