

Inference at * 2 2
of proof for Lemma order_split:

1. $T : \text{Type}$
2. $R : T \rightarrow T \rightarrow \mathbb{P}$
3. $\forall a:T. R(a,a)$
4. $\forall a, b, c:T. R(a,b) \Rightarrow R(b,c) \Rightarrow R(a,c)$
5. $\forall x, y:T. R(x,y) \Rightarrow R(y,x) \Rightarrow (x = y)$
6. $\forall x, y:T. \text{Dec}(x = y)$
7. $a : T$
8. $b : T$
9. $a = b$

$\vdash R(a,b)$
by (((((Unfold ‘so_apply‘ 0)
CollapseTHEN (RWH (HypC 9) 0)).)
CollapseTHEN (
(Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term))))).

1:

$\vdash R(b,b)$

.