

Inference at *
of proof for Lemma nth_tl_is_fseg:

$\vdash \forall T:\text{Type}, L_1, L_2:(T \text{ List}). \text{fseg}(T;L_1;L_2) \iff (\exists n:\{0..\|L_2\|+1\}^-. (L_1 = \text{nth_tl}(n;L_2)))$
by (((Unfold 'fseg' 0)
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
), (first_nat 3:n)) (first_tok :t) inil_term))))
CollapseTHEN (ExRepD)).

1:

1. $T : \text{Type}$
 2. $L_1 : T \text{ List}$
 3. $L_2 : T \text{ List}$
 4. $L : T \text{ List}$
 5. $L_2 = (L @ L_1)$
- $\vdash \exists n:\{0..\|L_2\|+1\}^-. (L_1 = \text{nth_tl}(n;L_2))$

2:

1. $T : \text{Type}$
 2. $L_1 : T \text{ List}$
 3. $L_2 : T \text{ List}$
 4. $n : \{0..\|L_2\|+1\}^-$
 5. $L_1 = \text{nth_tl}(n;L_2)$
- $\vdash \exists L:T \text{ List}. (L_2 = (L @ L_1))$

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