Inference at $*$ 2
of proof for Lemma select_nth_tl:

1. T : Type
2. T List
3. u : T
4. v : T List
5. $\forall n$:{0... $\|v\|$}, i:{0..($\|v\|$ - n)$^{-}$}. nth_tl(n;v)[i] = v[(i+n)]

⊢ $\forall n$:{0... $\|v\|$+1}, i:{0..(($\|v\|$+1) - n)$^{-}$}. nth_tl(n;[u / v])[i] = [u / v][(i+n)]

by InteriorProof ((((RepD)
CollapseTHENM (RecCaseSplit ‘nth_tl‘))·)
CollapseTHENA (
(Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1: .....truecase..... NILNIL

6. n : {0... $\|v\|$+1}
7. i : {0..(($\|v\|$+1) - n)$^{-}$}
8. $n \leq 0$

⊢ [u / v][i] = [u / v][(i+n)]

2:

6. n : {0... $\|v\|$+1}
7. i : {0..(($\|v\|$+1) - n)$^{-}$}
8. $0 < n$

⊢ nth_tl(n - 1;v)[i] = [u / v][(i+n)]

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http://www.nuprl.org/FDLcontent/p0_963683_/p121_58888_{select_nth_tl}2.html