Inference at $*$ 2 1 2
of proof for Lemma p-fun-exp-compose:

1. T : Type
2. n : $\mathbb{Z}$
3. $0 < n$
4. $\forall h, f{:}(T \rightarrow (T + \text{Top}))$. $f\hat{}n$ - 1 o h = primrec(n - 1;h;$\lambda i,g$. f o g)
5. h : $T \rightarrow (T + \text{Top})$
6. f : $T \rightarrow (T + \text{Top})$

$\vdash f$ o primrec(n - 1;p-id();$\lambda i,g$. f o g) o h = f o primrec(n - 1;h;$\lambda i,g$. f o g)
by (Fold ‘p-fun-exp‘ 0)
CollapseTHEN ((RWO ”p-compose-associative<” 0)

CollapseTHEN ((Auto·)
CollapseTHEN ((EqCD)
CollapseTHEN ((Auto·)
CollapseTHEN (
(if ((0) = 0) then BackThruSomeHyp else BHyp (0))·)·)·)·)·)·

.

http://www.nuprl.org/FDLcontent/p0_963683_/p35_1094419_{p-fun-exp-compose}2_1_2.html