Inference at $*$ 1 2 1 2 1 1 1
 of proof for Lemma less-fast-fib:

1. $n : \mathbb{Z}$
2. $0 < n$
3. $\forall a, b{:}\mathbb{N}.$
   $\{m{:}\mathbb{N} \mid$
    $\forall k{:}\mathbb{N}.$
    $(a = \text{fib}(k))$
    $\Rightarrow ((k \leq 0) \Rightarrow (b = 0))$
    $\Rightarrow ((0 < k) \Rightarrow (b = \text{fib}(k - 1)))$
    $\Rightarrow (m = \text{fib}((n - 1)+k))\}$
4. $a : \mathbb{N}$
5. $b : \mathbb{N}$
6. $\forall b@_0{:}\mathbb{N}.$
   $\{m{:}\mathbb{N} \mid$
    $\forall k{:}\mathbb{N}.$
    $(a+b = \text{fib}(k))$
    $\Rightarrow ((k \leq 0) \Rightarrow (b@_0 = 0))$
    $\Rightarrow ((0 < k) \Rightarrow (b@_0 = \text{fib}(k - 1)))$
    $\Rightarrow (m = \text{fib}((n - 1)+k))\}$
7. $m : \mathbb{N}$
8. $\forall k{:}\mathbb{N}.$
   $(a+b = \text{fib}(k))$
   $\Rightarrow ((k \leq 0) \Rightarrow (a = 0))$
   $\Rightarrow ((0 < k) \Rightarrow (a = \text{fib}(k - 1)))$
   $\Rightarrow (m = \text{fib}((n - 1)+k))$
9. $k : \mathbb{N}$
10. $a = \text{fib}(k)$
11. $(k \leq 0) \Rightarrow (b = 0)$
12. $(0 < k) \Rightarrow (b = \text{fib}(k - 1))$
13. $k = 0$

$\vdash a+b = \text{fib}(0+1)$

 by ((D (11)·)
 CollapseTHEN (Auto·)·)
 CollapseTHEN (((if (first_bool T:b
) then HypSubst' else RevHypSubst') (-1)(0))·)·

  1:

   11. $(0 < k) \Rightarrow (b = \text{fib}(k - 1))$
   12. $k = 0$
   13. $b = 0$

   $\vdash a+0 = \text{fib}(0+1)$

.

http://www.nuprl.org/FDLcontent/p0_963683_/p25_528941_{less-fast-fib}1_2_1_2_1_1_1.html