Inference at $*$ 1 2
 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. $b : \mathbb{N}$

$\vdash \{m{:}\mathbb{N} \mid$
  $\forall k{:}\mathbb{N}.$
  $(a = \text{fib}(k))$
  $\Rightarrow ((k \leq 0) \Rightarrow (b = 0))$
  $\Rightarrow ((0 < k) \Rightarrow (b = \text{fib}(k - 1)))$
  $\Rightarrow (m = \text{fib}(n+k))\}$
 by (InstHyp [a+b] 3)
 CollapseTHENA ((Try ((Complete (Auto'))$\cdot$))$\cdot$)$\cdot$

  1:

    6. $\forall b@_0{:}\mathbb{N}.$
       $\{m{:}\mathbb{N} \mid$
        $\forall k{:}\mathbb{N}.$
        $(a+b = \text{fib}(k))$
        $\Rightarrow ((k \leq 0) \Rightarrow (b@_0 = 0))$
        $\Rightarrow ((0 < k) \Rightarrow (b@_0 = \text{fib}(k - 1)))$
        $\Rightarrow (m = \text{fib}((n - 1)+k))\}$

    $\vdash \{m{:}\mathbb{N} \mid$
       $\forall k{:}\mathbb{N}.$
       $(a = \text{fib}(k))$
       $\Rightarrow ((k \leq 0) \Rightarrow (b = 0))$
       $\Rightarrow ((0 < k) \Rightarrow (b = \text{fib}(k - 1)))$
       $\Rightarrow (m = \text{fib}(n+k))\}$

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http://www.nuprl.org/FDLcontent/p0_963683_/p25_528941_{less-fast-fib}1_2.html