Inference at $*$ 1
of proof for Lemma fib_wf:

1. $n : \mathbb{N}$
2. $\forall n_1{:}\mathbb{N}.\ (n_1 < n) \Rightarrow (\text{fib}(n_1) \in \mathbb{N})$

$\vdash \text{fib}(n) \in \mathbb{N}$

by InteriorProof ((RecCaseSplit 'fib')
CollapseTHENA ((Auto_aux (first_nat 1:n
) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

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

3. $(n = 0) \vee (n = 1)$

$\vdash 1 \in \mathbb{N}$

2: .....falsecase..... NILNIL

3. $(\neg(n = 0))$ & $(\neg(n = 1))$

$\vdash \text{fib}(n - 1)+\text{fib}(n - 2) \in \mathbb{N}$

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