Inference at $*$ 1 1 2
 of proof for Lemma fun_with_inv_is_bij:

1. A : Type
2. B : Type
3. f : $A \rightarrow B$
4. g : $B \rightarrow A$
5. $(g \circ f) = \mathrm{Id}\{A\}$
6. $(f \circ g) = \mathrm{Id}\{B\}$
7. b : B

$\vdash \exists a{:}A.\ (f(a) = b)$
 by ((With $g(b)$ (D 0))
 CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n
 ),(first_nat 3:n)) (first_tok :t) inil_term)))·

 1:

 $\vdash f(g(b)) = b$
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