Inference at * 1 1
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. $(f \circ g) = \mathrm{Id}\{B\}$

$\vdash$ Bij(A;B;f)

by ((((Repeat (Unfolds "biject inject surject" 0))
CollapseTHEN (GenUnivCD))·)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1:

7. a_1 : A
8. a_2 : A
9. $f(a_1) = f(a_2)$

$\vdash$ $a_1 = a_2$

2:

7. b : B

$\vdash$ $\exists a{:}A.\ (f(a) = b)$

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