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

1. A : Type
2. B : Type
3. f : $A \to B$
4. $\forall a_1, a_2{:}A.\ (f(a_1) = f(a_2)) \Rightarrow (a_1 = a_2)$
5. $\exists f_1{:}B \to A.\ (\forall b{:}B.\ f(f_1(b)) = b)$

$\vdash \exists g{:}B \to A.$ InvFuns$(A;B;f;g)$
by (New ['g'] (D 5))

1:

5. g : $B \to A$
6. $\forall b{:}B.\ f(g(b)) = b$

$\vdash \exists g{:}B \to A.$ InvFuns$(A;B;f;g)$

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