

Inference at * 1
of proof for Lemma dep_ax_choice:

1. $A : \text{Type}$
2. $B : A \rightarrow \text{Type}$
3. $Q : x:A \rightarrow B(x) \rightarrow \text{Type}$
4. $\forall x:A. \exists y:B(x). Q(x,y)$

 $\vdash \exists f:x:A \rightarrow B(x). (\forall x:A. Q(x,f(x)))$
by ((Unfolds “all exists“ 4)
CollapseTHEN (RenameVar ‘g’ 4)).

1:

4. $x:A \rightarrow y:B(x) \times Q(x,y)$

 $\vdash \exists f:x:A \rightarrow B(x). (\forall x:A. Q(x,f(x)))$
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