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

1. A : Type
2. B : A→Type
3. Q : x:A→$B(x)$→Type
4. $\forall x$:A. $\exists y$:$B(x)$. $Q(x,y)$
⊢$\exists f$:x:A→$B(x)$. ($\forall x$:A. $Q(x,f(x))$)
by ((Unfolds "all exists" 4)
CollapseTHEN (RenameVar 'g' 4))·

1:

4. x:A→y:$B(x)$ × $Q(x,y)$
⊢ $\exists f$:x:A→$B(x)$. ($\forall x$:A. $Q(x,f(x))$)
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http://www.nuprl.org/FDLcontent/p0_942988_/p121_84395_{dep_ax_choice}1.html