

Inference at *
of proof for Lemma dep_ax_choice:

$\vdash \forall A:\text{Type}, B:(A \rightarrow \text{Type}), Q:(x:A \rightarrow B(x) \rightarrow \text{Type}).$
 $(\forall x:A. \exists y:B(x). Q(x,y)) \Rightarrow (\exists f:x:A \rightarrow B(x). (\forall x:A. Q(x,f(x))))$
by ((UnivCD)
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term))).

1:

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