

Inference at *
of proof for Lemma decidable_functionality:

$\vdash \forall P, Q : \mathbb{P}. (P \iff Q) \Rightarrow (\text{Dec}(P) \iff \text{Dec}(Q))$
by ((GenUnivCD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n), (first_nat
3:n)) (first_tok :t) inil_term))).

1:

1. $P : \mathbb{P}$
 2. $Q : \mathbb{P}$
 3. $P \iff Q$
 4. $\text{Dec}(P)$
- $\vdash \text{Dec}(Q)$

2:

1. $P : \mathbb{P}$
 2. $Q : \mathbb{P}$
 3. $P \iff Q$
 4. $\text{Dec}(Q)$
- $\vdash \text{Dec}(P)$
- .