

Inference at *
of proof for Lemma not_over_and:

$\vdash \forall A, B : \mathbb{P}. \text{Dec}(A) \Rightarrow ((\neg(A \ \& \ B)) \iff ((\neg A) \vee (\neg B)))$
by ((GenRepD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term))).

1:

1. $A : \mathbb{P}$
 2. $B : \mathbb{P}$
 3. $\text{Dec}(A)$
 4. $\neg(A \ \& \ B)$
- $\vdash (\neg A) \vee (\neg B)$

2:

1. $A : \mathbb{P}$
 2. $B : \mathbb{P}$
 3. $\text{Dec}(A)$
 4. $(\neg A) \vee (\neg B)$
- $\vdash \neg(A \ \& \ B)$

.