

Inference at \*  
of proof for Lemma and\_functionality\_wrt\_implies:

$\vdash \forall P_1, P_2, Q_1, Q_2 : \mathbb{P}. \{P_1 \Rightarrow P_2\} \Rightarrow \{Q_1 \Rightarrow Q_2\} \Rightarrow \{(P_1 \wedge Q_1) \Rightarrow (P_2 \wedge Q_2)\}$   
by (((Unfold 'guard' 0)  
CollapseTHEN ((Auto\_aux (first\_nat 1:n) ((first\_nat 1:n  
), (first\_nat 3:n)) (first\_tok :t) inil\_term))))  
CollapseTHEN (HypBackchain)).