

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

```
⊢∀P,Q:ℙ. {P ⇒ Q} ⇒ {(↓P) ⇒ (↓Q)}  
  by (((Unfold 'guard' 0)  
      CollapseTHEN (RepD)).)  
  CollapseTHEN ((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.  $P \Rightarrow Q$
  4.  $\downarrow P$
- ⊢  $\downarrow Q$
- .