

Inference at \*  
of proof for Lemma can-apply-compose:

```
⊢∀A, B, C:Type, g:(A→(B + Top)), f:(B→(C + Top)), x:A.  
  (↑can-apply(f o g ;x)) ⇒ {(↑can-apply(g;x) & (↑can-apply(f;do-apply(g;x)))}  
  by ((Auto·)  
  CollapseTHEN (MoveToConcl (-1))·)  
  CollapseTHEN (((  
    RWO "can-apply-compose-sq" (0))  
  CollapseTHENA (Auto·)·)  
  CollapseTHEN ((Unfold 'guard  
    ' ( 0)·)  
  CollapseTHEN (AutoBoolCase can-apply(g;x))·)··
```