```
⊢ ∀[T:Type]. ∀[P:T → ℙ]. ∀[C:ℙ].  ((∃x:T. ((P x) ∧ C)) ⇒ ((∃x:T. (P x)) ∧ C))
|
BY RepeatFor 3 ((UD· THENA Auto))
|
[1]. T: Type
[2]. P: T → ℙ
[3]. C: ℙ
⊢ (∃x:T. ((P x) ∧ C)) ⇒ ((∃x:T. (P x)) ∧ C)
|
BY (D 0 THENA Auto)
|
4. ∃x:T. ((P x) ∧ C)
⊢ (∃x:T. (P x)) ∧ C
|
BY D 4
|
4. x: T
5. (P x) ∧ C
⊢ (∃x:T. (P x)) ∧ C
|
BY D 5
|
5. P x
6. C
⊢ (∃x:T. (P x)) ∧ C
|
BY D 0
|\
| ⊢ ∃x:T. (P x)
| |
1 BY (InstConcl [⌈x⌉]· THENA Auto)
| |
| ⊢ P x
| |
1 BY NthHyp 5
 \
  ⊢ C
  |
  BY NthHyp 6
```

Extract:

```
λf.let x,g = f in
     let p,c = g in <<x, p>, c>

  where f : ∃x:T. ((P x) ∧ C)
        g : (P x) ∧ C
        p : P x
        c : C
```