

```

⊢ ∀[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 RepeatFor 2 ((D 0 THENA Auto))
|
4. ∀x:T. ((P x) ⇒ C)
5. ∃x:T. (P x)
⊢ C
|
BY D 5
|
5. x: T
6. P x
⊢ C
|
BY (SimpleInstHyp 「x」 4. THENA Auto)
|
7. (P x) ⇒ C
⊢ C
|
BY D 7
| \
| ⊢ P x
| |
1 BY NthHyp 6
| \
| 7. C
| ⊢ C
|
BY NthHyp 7

```

Extract:

```

λf,g. let x,p = g in f x p
  where f : ∀x:T. ((P x) ⇒ C)
        g : ∃x:T. (P x)
        p : P x

```