```
decidable__ex_unit  THM

⊢  ∀P:(Unit→Prop). Dec(P(·)) ⇒ Dec(∃x:Unit. P(x))
| by Auto
|    THEN
|    BackThru
|    Thm* ∀P:(T→Prop).
|         (∀x:T. Dec(P(x))) ⇒ finite-type(T) ⇒ Dec(∃x:T. P(x))
|    {decidable_DASH_exists_DASH_finite}
|
|\
| .....decidable? .....
| 1. P : Unit→Prop
| 2. Dec(P(·))
| 3. x : Unit
| ⊢  Dec(P(x))  by Analyze -1 THEN Fold `it` 0
|
.\
. 1. P : Unit→Prop
. 2. Dec(P(·))
. ⊢  finite-type(Unit)
. | by Unfold `finite-type` 0 THEN InstConcl [1;λx.·]
. |
. 1. P : Unit→Prop
. 2. Dec(P(·))
. ⊢  Surj(ℕ1; Unit; λx.·)
. | by Unfold `surject` 0 THEN Reduce 0 THEN InstConcl [0]
. |
. 1. P : Unit→Prop
. 2. Dec(P(·))
. 3. b : Unit
. ⊢  · = b  by Analyze -1 THEN Fold `it` 0
END
```