```
card0_iff_uninhabited  THM

⊢  (A ∼ ℕ0) ⟺ ¬(∃∈A)  by Auto
|
|\
| 1. A : Type
| 2. A ∼ ℕ0
| ⊢  ¬(∃∈A)  by Analyze-1
| |
| 2. f : A→ℕ0
| 3. ∃g:(ℕ0→A). InvFuns(A;ℕ0;f;g)
| ⊢  ¬(∃∈A)  by Analyze
| |
| 4. ∃∈A
| ⊢  False  by Analyze2
|
.\
. 1. A : Type
. 2. ¬(∃∈A)
. ⊢  A ∼ ℕ0  by OOCifExteq
. |
. ⊢  A =ext ℕ0  by Analyze
. |
. ⊢  ∀x:A. x ∈ ℕ0  by Analyze
. |
. 3. x : A
. ⊢  x ∈ ℕ0  by Analyze2
END
```