```
not_nat_occ_natfuns  THM

⊢  ¬((ℕ→ℕ) ~ ℕ)  by Analyze
|
1. (ℕ→ℕ) ~ ℕ
⊢  False
| by FwdThru:
|    Thm*  (∃f:(A→B). Bij(A; B; f)) ⟺ (B ~ A)
|    {bij_iff_1_1_corr_version2a}
|    on [ (ℕ→ℕ) ~ ℕ ]
|    THEN
|    Analyze-1
|
2. f : ℕ→ℕ→ℕ
3. Bij(ℕ; ℕ→ℕ; f)
⊢  False  by Analyze-1
|
3. Inj(ℕ; ℕ→ℕ; f)
4. Surj(ℕ; ℕ→ℕ; f)
⊢  False  by Witness-1: λi.f(i,i)+1
|
5. ∃a:ℕ. f(a) = (λi.f(i,i)+1)
⊢  False  by Analyze-1
|
5. a : ℕ
6. f(a) = (λi.f(i,i)+1)
⊢  False  by ApFun: Hyp:-1 to: a
|
7. f(a,a) = f(a,a)+1 ∈ ℕ
⊢  False  by Auto
END
```