```
sfa_doc_predicativity_sample8  THM

⊢  ∀f:(ℕ→ℕ).
|  (∀n:ℕ. f(n) = 0)
|  ⇒
|  (∀n:ℕ. if f(n)=₂0→ False else ∀C:Prop{1}. C fi) ∈ Prop{1}
| by UnivCD
|
1. f : ℕ→ℕ
2. ∀n:ℕ. f(n) = 0
⊢  (∀n:ℕ. if f(n)=₂0→ False else ∀C:Prop. C fi) ∈ Prop  by Analyze
|
|\
| ⊢  ℕ ∈ Type  by Auto
|
.\
. 3. n : ℕ
. ⊢  if f(n)=₂0→ False else ∀C:Prop. C fi ∈ Prop
. | by Inst: ∀n:ℕ. f(n) = 0 Using:[n]
. |
. 4. f(n) = 0
. ⊢  if f(n)=₂0→ False else ∀C:Prop. C fi ∈ Prop  by SplitITE Concl
END
```