```
sfa_doc_ntuple_wf  THM

⊢  ∀A:Type, n:ℕ. (A^n) ∈ Type  by Analyze
|
1. A : Type
⊢  ∀n:ℕ. (A^n) ∈ Type  by CompNatInd Concl
|
2. n : ℕ
3. ∀n1:ℕ. n1<n ⇒ (A^n1) ∈ Type
⊢  (A^n) ∈ Type
| by Compute ⌈A^n⌉ *⇒ if n=₂0→ Unit ; n=₂1→ A else A×(A^(n-1)) fi
|    THEN
|    SplitITE Concl
|    THENL
|    [Id;SplitITE Concl]
|
|\
| .....truecase .....
| 4. n = 0
| ⊢  Unit ∈ Type  by Auto
|
|\
| .....truecase .....
| 4. n ≠ 0
| 5. n = 1
| ⊢  A ∈ Type  by Trivial
|
.\
. .....falsecase .....
. 4. n ≠ 0
. 5. n ≠ 1
. ⊢  A×(A^(n-1)) ∈ Type  by Analyze
. |
. |\
. | ⊢  A ∈ Type  by Trivial
. |
. .\
. . ⊢  (A^(n-1)) ∈ Type  by BackThru: Hyp:3
END
```