```
prev_nat_pair_wf  THM

⊢  prev_nat_pair ∈ {xy:(ℕ×ℕ)| ¬xy = <0,0> ∈ ℕ×ℕ }→ℕ×ℕ
| by Def THEN Analyze
|    THEN
|    Analyze-1 THEN New:[x | y] Analyze1 THEN Reduce Concl
|
1. x : ℕ
2. y : ℕ
3. ¬<x,y> = <0,0> ∈ ℕ×ℕ
⊢  if x=₂0→ <y-1,0> else <x-1,y+1> fi ∈ ℕ×ℕ  by SplitITE Concl
|
4. x = 0
⊢  y-1 ∈ ℕ  by ¬y = 0 ∈ ℕ  Asserted
|
.....assertion .....
⊢  ¬y = 0 ∈ ℕ  by SimilarTo: Hyp:3
|
5. y = 0 ∈ ℕ
⊢  <x,y> = <0,0> ∈ ℕ×ℕ  by Analyze
END
```