```
delete_fenum_value_wf  THM

⊢  Inj(ℕ(m+1); ℕ(k+1); f) ⇒ (Replace value k by f(m) in f) ∈ ℕm→ℕk
| by UnivCD
|    THEN
|    Compute
|      ⌈Replace value k by f(m) in f⌉
|      *⇒
|      λi.if f(i)=₂k→ f(m) else f(i) fi
|
1. m : ℕ
2. k : ℕ
3. f : ℕ(m+1)→ℕ(k+1)
4. Inj(ℕ(m+1); ℕ(k+1); f)
⊢  (λi.if f(i)=₂k→ f(m) else f(i) fi) ∈ ℕm→ℕk  by Analyze
|
5. i : ℕm
⊢  if f(i)=₂k→ f(m) else f(i) fi ∈ ℕk  by EqIntCases 0
|
.....truecase .....
6. f(i) = k
⊢  f(m) ∈ ℕk  by ¬f(m) = k ∈ ℤ  Asserted
|
.....assertion .....
⊢  ¬f(m) = k  by ¬m = i ∈ ℤ  Asserted
|
7. ¬m = i
⊢  ¬f(m) = k  by SimilarHyp -1
|
7. f(m) = k
⊢  m = i  by BackThru: Hyp:4
END
```