```
honto_def  THM

⊢  ∀'a,'b:S.
|  all
|  (λf:'a → 'b. equal
|                (onto(f)
|                ,all(λy:'b. exists(λx:'a. equal(y,f(x))))))
| by Simpset [‘hol_to_nuprl‘] THEN Simp THEN StrongAuto
|
1. 'a : S
2. 'b : S
3. f : 'a→'b
⊢  (↓bonto('a;'b;f)) = (∀by:'b. (∃bx:'a. (y =b (f(x)))))
| by Unab [‘onto‘] THEN Simpset [‘bequal‘] THEN Simp THEN StrongAuto
|
|\
| 1. 'a : S
| 2. 'b : S
| 3. f : 'a→'b
| 4. ∀y:'b. ∃x:'a. y = f(x)
| 5. y : 'b
| ⊢  ∃x:'a. y = f(x)  by BackThru 4 THEN Simp THEN StrongAuto
|
.\
. 1. 'a : S
. 2. 'b : S
. 3. f : 'a→'b
. 4. ∀y:'b. ∃x:'a. y = f(x)
. 5. y : 'b
. ⊢  ∃x:'a. y = f(x)  by BackThru 4 THEN Simp THEN StrongAuto
END
```