```
hsimp_rec_fun_wd  THM

⊢  ∀'a:S.
   all
   (λx:'a. all
           (λf:'a → 'a. all
                         (λn:hnum. equal
                                   (simp_rec_fun(x,f,n)
                                   ,select
                                    (λfun:hnum → 'a. simp_rec_rel
                                                     (fun
                                                     ,x
                                                     ,f
                                                     ,n))))))
  by Unab [`hsimp_rec_fun`] THEN StrongAuto
     THEN
     Simpsetp [`hol_to_nuprl`;`bequal`]
     THEN
     StrongAuto
     THEN
     Try (Complete (Unfold `label` 0))
END
```