```
hsimp_rec_exists  THM

⊢  ∀'a:S.
   all
   (λx:'a. all
           (λf:'a → 'a. all
                        (λn:hnum. exists
                                  (λfun:hnum → 'a. simp_rec_rel
                                                   (fun
                                                   ,x
                                                   ,f
                                                   ,n)))))
  by HOL "hsimp_rec_exists"
END
```