```
simp_rec_fun_lemma  THM

⊢  ∀'a:S, n:ℕ, f:('a→'a), x:'a.
   (∃fun:(ℕ→'a). simp_rec_rel(fun,x,f,n))
   ⟺
   simp_rec_fun(x,f,n,0) = x
   & (∀m:ℕ. m<n ⇒ simp_rec_fun(x,f,n,m+1) = f(simp_rec_fun(x,f,n,m)))
  by RewriteOfThm Thm: hsimp_rec_fun_lemma
     (SimpsetC [‘hol_to_nuprl‘;‘bequal‘])
     THEN
     Try (Complete (Unfold ‘hnum‘ 0))
END
```