```
hnum_iso_def  THM

⊢  and
   (all(λa:hnum. equal(abs_num(rep_num(a)),a))
   ,all(λr:hind. equal(is_num_rep(r),equal(rep_num(abs_num(r)),r))))
  by (HN
      THEN
      (L
       Thm* ∀'a,'b:S, P:('b→𝔹), rep:('a→'b), abs:('b→'a).
            iso_pair('a;'b;P;rep;abs)
            ⇒
            (∀a:'a. abs(rep(a)) = a)
            & (∀r:'b. P(r) = ((rep(abs(r))) =_b r))
       {iso_pair_char}))
     THEN
     StrongAuto
     THEN
     L Thm* iso_pair(ℕ;ℕ;is_num_rep;rep_num;abs_num)    {num_iso}
     THEN
     StrongAuto
END
```