```
not_exists  THM

⊢  ∀T:S, P:(T→Prop). ¬(∃x:T. P(x)) ⟺ (∀x:T. ¬P(x))
| by RewriteOfThm
|    Thm* ∀T:S, P:(T→𝔹). ¬₂(∃_b x:T. P(x)) = (∀_b x:T. ¬₂P(x))
|    {bnot_bexists}
|    (SimpsetC [‘bequal‘])
|
1. ∀T:S, P:(T→𝔹). ¬(∃x:T. P(x)) ⟺ (∀x:T. ¬P(x))
⊢  ∀T:S, P:(T→Prop). ¬(∃x:T. P(x)) ⟺ (∀x:T. ¬P(x))
  by ((RepeatMFor 2 (Analyze 0)) THEN (Unab [‘so_apply‘])
      THEN
      (InstHyp [T;λx.↓_b(P(x))] 1)
      THEN
      Simp)
     THEN
     StrongAuto
END
```