

Inference at * 1 2
of proof for Lemma connex_iff_trichot:

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1. T : Type
2. R : T → T → ℙ
3. ∀ a, b : T. Dec(R(a,b))
4. ∀ a, b : T. (R(a,b) & (¬R(b,a))) ∨ (R(a,b) & R(b,a)) ∨ (R(b,a) & (¬R(a,b)))
5. x : T
6. y : T
⊢ R(x,y) ∨ R(y,x)
  by (% This side doesn't need decidability %
  (((InstHyp [x;y] 4)
  CollapseTHENM (
    ProveProp)))·)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)
  )) (first_tok :t) inil_term)))·)
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