Inference at $*$ 1 2
 of proof for Lemma bool_cases_sqequal:

$\vdash((\text{inr } \cdot\ ) \sim (\text{inl } \cdot\ )) \vee ((\text{inr } \cdot\ ) \sim (\text{inr } \cdot\ ))$
  by ((Sel 2 (D 0))
  CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat
    3:n)) (first_tok :t) inil_term)))·

    .

---

http://www.nuprl.org/FDLcontent/p0_942988_/p121_85520_{bool_cases_sqequal}1_2.html