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

1. $b : \mathbb{B}$
$\vdash (b \sim \mathrm{tt}) \vee (b \sim \mathrm{ff})$
 by ((((((((D 1)
 CollapseTHEN (D 1))·)
 CollapseTHEN (Thin 1))·)
 CollapseTHEN (
  Unfolds “btrue bfalse“ 0))·)
 CollapseTHEN (Fold ‘it‘ 0))·

  1:

    (no hyps)
    $\vdash ((\mathrm{inl}\ \cdot\ ) \sim (\mathrm{inl}\ \cdot\ )) \vee ((\mathrm{inl}\ \cdot\ ) \sim (\mathrm{inr}\ \cdot\ ))$
  2:

    (no hyps)
    $\vdash ((\mathrm{inr}\ \cdot\ ) \sim (\mathrm{inl}\ \cdot\ )) \vee ((\mathrm{inr}\ \cdot\ ) \sim (\mathrm{inr}\ \cdot\ ))$
  .