

Inference at * 1 1 1

of proof for Lemma bool_sq:

....assertion.... NILNIL

1. $x : ?Unit$

2. $y : ?Unit$

3. $x = y$

4. $\text{case } x \text{ of } \text{inl}(x) => x \mid \text{inr}(x) => x = \text{case } y \text{ of } \text{inl}(x) => x \mid \text{inr}(x) => x$

5. $\text{case } x \text{ of } \text{inl}(x) => \text{True} \mid \text{inr}(x) => \text{False} = \text{case } y \text{ of } \text{inl}(x) => \text{True} \mid \text{inr}(x) => \text{False}$

$\vdash \neg(\text{True} = \text{False})$

by ((D 0)

THENW ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)
)) (first_tok :t) inil_term)))·

1:

6. $\text{True} = \text{False}$

$\vdash \text{False}$

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