

Inference at * 1 1
of proof for Lemma dec_iff_ex_bvfun:

1. $T : \text{Type}$
2. $E : T \rightarrow T \rightarrow \mathbb{P}$
3. $g : \forall x, y : T. (E(x, y)) \vee (\neg(E(x, y)))$
 $\vdash \forall x, y : T. (\uparrow \text{case } g(x, y) \text{ of } \text{inl}(a) => \text{tt} \mid \text{inr}(b) => \text{ff}) \iff (E(x, y))$
by ((RepD)
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n), (first_nat 4:n
)) (first_tok :t) inil_term)))

1:

4. $x : T$
5. $y : T$
 $\vdash (\uparrow \text{case } g(x, y) \text{ of } \text{inl}(a) => \text{tt} \mid \text{inr}(b) => \text{ff}) \iff (E(x, y))$
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