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

1. T : Type
2. E : $T \to T \to \mathbb{P}$
3. EquivRel(T;x,y.$E(x,y)$)
4. f : $T \to T \to \mathbb{B}$
5. $\forall x$, y:T. $(\uparrow(x\ f\ y)) \iff E(x,y)$
6. $f \in (x,y{:}T//E(x,y)) \to (x,y{:}T//E(x,y)) \to \mathbb{B}$
7. u : x,y:$T//E(x,y)$
8. v : x,y:$T//E(x,y)$

$\vdash \downarrow((\uparrow(u\ f\ v)) \iff (u = v))$
by ((((((UseEqWitness Ax)
CollapseTHENM (D 8))$\cdot$)
CollapseTHENM (D 7))$\cdot$)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))$\cdot$

1:

7. v_1 : T
8. v_2 : T
9. $E(v_1,v_2)$
10. u_1 : T
11. u_2 : T
12. $E(u_1,u_2)$

$\vdash$ Ax = Ax

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_78690_{decidable_quotient_equal}1_1_1_2_1_1.html