Inference at $*$ 2
 of proof for Lemma decidable_functionality:

1. $P : \mathbb{P}$
2. $Q : \mathbb{P}$
3. $P \iff Q$
4. Dec(Q)

$\vdash$Dec(P)
 by ((Using ['A',Q] (BackThruLemma 'iff_preserves_decidability'))
 CollapseTHENA (
  (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 4:n)) (first_tok :t) inil_term)))·

1:

$\vdash$ Dec(Q)

2:

$\vdash Q \iff P$

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_99290_{decidable_functionality}2.html