

Inference at \* 1  
of proof for Lemma decidable-filter:

1.  $T : \text{Type}$
  2.  $T \text{ List}$
  3.  $P : \{x:T \mid (x \in [])\} \rightarrow \mathbb{P}$
  4.  $\forall x \in []. \text{Dec}(P(x))$
- $\vdash \exists L':T \text{ List. } (L' \subseteq [] \ \& \ (\forall x:T. (x \in L') \iff ((x \in []) \ \& \ P(x))))$   
by ((InstConcl [ ]))  
CollapseTHEN (MaAuto·).

1:

$\vdash [] \subseteq []$

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