

Inference at *
of proof for Lemma can-apply-p-lift:

$\vdash \forall A, B: \text{Type}, P: (A \rightarrow \mathbb{P}), d: (x:A \rightarrow \text{Dec}(P(x))), f: (\{x:A \mid P(x)\} \rightarrow B), x:A.$
($\uparrow \text{can-apply(p-lift}(d;f);x) \iff P(x)$)
by (RepUR “can-apply p-lift“ (0)·)
CollapseTHEN ((UnivCD)
CollapseTHENA (Auto·)·
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1. $A : \text{Type}$
 2. $B : \text{Type}$
 3. $P : A \rightarrow \mathbb{P}$
 4. $d : x:A \rightarrow \text{Dec}(P(x))$
 5. $f : \{x:A \mid P(x)\} \rightarrow B$
 6. $x : A$
- $\vdash (\uparrow \text{isl}(\text{case } d(x) \text{ of } \text{inl}(a) \Rightarrow \text{inl}(f(x)) \mid \text{inr}(a) \Rightarrow \text{inr } a)) \iff P(x)$
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