Inference at $*$
of proof for Lemma do-apply-p-restrict:

$\vdash \forall A, B{:}\text{Type}, f{:}(A \rightarrow (B + \text{Top})), P{:}(A \rightarrow \mathbb{P}), p{:}(\forall x{:}A.\ \text{Dec}(P(x))), x{:}A.$
$(\uparrow\text{can-apply}(\text{p-restrict}(f;p);x)) \Rightarrow (\text{do-apply}(\text{p-restrict}(f;p);x) = \text{do-apply}(f;x))$

```
by ((((Unfold ‘p-restrict‘ 0)
CollapseTHEN (((Auto·)
CollapseTHEN (((((
   RWO "do-apply-compose" 0)
THEN (Auto·))·)
CollapseTHEN (((((
   RWO "can-apply-compose-iff" (-1))
THEN (Auto·))·)
CollapseTHEN (((
   RWO "do-apply-p-filter" 0)
THEN (Auto·))·))·))·))·))·))·)
CollapseTHEN (((
   All (RWO "do-apply-p-filter"))
CollapseTHEN (Auto·))·))·
```

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http://www.nuprl.org/FDLcontent/p0_963683_/p29_612118_{do-apply-p-restrict}.html