

## do-apply-mu'<sup>11,40</sup>

$\forall A:\text{Type}, P:(A \rightarrow \mathbb{N} \rightarrow \mathbb{B}), d:(\forall x:A. \text{Dec}(\exists n:\mathbb{N}. (\uparrow(P(x,n))))), x:A.$   
 $(\uparrow \text{can-apply}(\text{mu}'(P);x))$   
 $\Rightarrow \{(\uparrow(P(x,\text{do-apply}(\text{mu}'(P);x)))) \ \& \ (\forall i:\{0..\text{do-apply}(\text{mu}'(P);x)^-\}. \neg(\uparrow(P(x,i))))\}$

ProofTree