

## **can-apply-compose-iff**<sup>11,40</sup>

$\forall A, B, C:\text{Type}, g:(A \rightarrow (B + \text{Top})), f:(B \rightarrow (C + \text{Top})), x:A.$

$(\uparrow \text{can-apply}(f \circ g ; x)) \iff ((\uparrow \text{can-apply}(g;x)) \ \& \ (\uparrow \text{can-apply}(f;\text{do-apply}(g;x))))$

ProofTree