

Inference at *
of proof for Lemma simple-primrec-add:

$\vdash \forall b, F:\text{Top}, n, m:\mathbb{N}. \text{primrec}(n+m;b;\lambda i.F) \sim \text{primrec}(n;\text{primrec}(m;b;\lambda i.F);\lambda i.F)$
by (InductionOnNat)
CollapseTHEN ((Reduce 0)
CollapseTHEN ((D (0)·)

 CollapseTHENA (Auto··)
CollapseTHEN (((Try ((Complete ((ProveSqEq)
CollapseTHEN (Auto··)))·))·)
CollapseTHEN ((RW (SubC (RecUnfoldTopC ‘primrec’) 0)
CollapseTHEN ((if (((first_nat 2:n) = 0) then (Repeat (((if (0
) =0 then SplitOnConclITE else SplitOnHypITE (0))·)
CollapseTHENA (Auto··)

 CollapseTHEN ((Try ((Complete (Auto’))·))·)) else (RepeatFor (first_nat 2:n) (((if (0
) =0 then SplitOnConclITE else SplitOnHypITE (0))·)
CollapseTHENA (Auto··)

 CollapseTHEN ((Try ((Complete (Auto’))·))·))·)
CollapseTHEN ((EqCD)

 CollapseTHEN ((Reduce 0)
CollapseTHEN (((Try (Trivial))·)
CollapseTHEN ((Subst’
((n+m) - 1) ~ ((n - 1)+m) (0)·)
CollapseTHEN (((Try ((if ((0
) = 0) then BackThruSomeHyp else BHyp (0)))·))·)
CollapseTHEN (Auto··))·))·))·)
)··

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