

Inference at *
of proof for Lemma complete_nat_ind_with_y:

$\vdash \forall P:(\mathbb{N} \rightarrow \mathbb{P}\{k\}). (\forall i:\mathbb{N}. (\forall j:\mathbb{N}i. P(j)) \Rightarrow P(i)) \Rightarrow (\forall i:\mathbb{N}. P(i))$
by UseWitness $\lambda P,g. Y(\lambda f,x. g(x,f))$

1:

$\vdash (\lambda P,g. Y(\lambda f,x. g(x,f)))$
 $\in (\forall P:(\mathbb{N} \rightarrow \mathbb{P}\{k\}). (\forall i:\mathbb{N}. (\forall j:\mathbb{N}i. P(j)) \Rightarrow P(i)) \Rightarrow (\forall i:\mathbb{N}. P(i)))$
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