Inference at $*$ 1 1 1 2
 of proof for Lemma comp_nat_ind_tp:

1. $P : \mathbb{N} \to \mathbb{P}\{\mathrm{k}\}$
2. $\forall i{:}\mathbb{N}.\ (\forall j{:}\mathbb{N}.\ (j < i) \Rightarrow P(j)) \Rightarrow P(i)$
3. $i : \mathbb{N}$
4. $\forall zz,\ i{:}\mathbb{N}.\ (i < zz) \Rightarrow P(i)$

$\vdash P(i)$

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 by (\p.let i = mvt (var_of_hyp (-2) p) in
  let ip1 = mk_add_term i 1 in
  ((
 DTerm ip1 (-1))
 CollapseTHENM (DTerm i (-1)))· p)
```

1: . . . . .wf. . . . . NILNIL

   3. $i : \mathbb{N}$
   $\vdash i{+}1 \in \mathbb{N}$

2: . . . . .wf. . . . . NILNIL

   3. $i : \mathbb{N}$
   $\vdash i \in \mathbb{N}$

3:

   4. $(i < (i{+}1)) \Rightarrow P(i)$
   $\vdash P(i)$

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_94017_{comp_nat_ind_tp}1_1_1_2.html