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

1. $P : \mathbb{N} \to \mathbb{P}\{\mathrm{k}\}$
2. $\forall i{:}\mathbb{N}.\ (\forall j{:}\mathbb{N}.\ (j < i) \Rightarrow P(j)) \Rightarrow P(i)$
$\vdash \forall i{:}\mathbb{N}.\ P(i)$
 by ((D 0)
 CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
 )) (first_tok :t) inil_term)))·

 1:

 3. $i : \mathbb{N}$
 $\vdash P(i)$
 .