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

1. $i : \mathbb{N}$
2. $f : \{f \mid i{:}\{i_1{:}\mathbb{N} \mid i_1\ (\lambda i,j.\ i < j)\ i\} \rightarrow \text{if } (i =_0 0) \text{ then } \mathbb{Z} \text{ else } \{f(i \text{ - } 1)\ldots\} \text{ fi } \}$

$\vdash$ if $(i =_0 0)$ then $\mathbb{Z}$ else $\{f(i \text{ - } 1)\ldots\}$ fi
by Assert $\forall j{:}\{k{:}\mathbb{N} \mid k < i\}\ .\ f(j) \in \mathbb{Z}$

1: .....assertion..... NILNIL

$\vdash \forall j{:}\{k{:}\mathbb{N} \mid k < i\}\ .\ f(j) \in \mathbb{Z}$

2:

3. $\forall j{:}\{k{:}\mathbb{N} \mid k < i\}\ .\ f(j) \in \mathbb{Z}$

$\vdash$ if $(i =_0 0)$ then $\mathbb{Z}$ else $\{f(i \text{ - } 1)\ldots\}$ fi

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_83200_{fincr_formation}1_2.html