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

1. $i_2 : \mathbb{Z}$
2. $j_2 : \mathbb{Z}$
3. $i_2 \leq j_2$
4. $j_1 : \mathbb{Z}$
5. $0 \leq j_1$

$\vdash (0+i_2) \leq (j_1+j_2)$
by (RA (IntInd 4))

1:

5. $0 < j_1$
6. $(0 \leq (j_1 - 1)) \Rightarrow ((0+i_2) \leq ((j_1 - 1)+j_2))$
7. $0 \leq j_1$

$\vdash (0+i_2) \leq (j_1+j_2)$

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_77281_{add_functionality_wrt_le}1_1_2.html