

map-concat-filter-lemma1^{0,22}

$\forall A, B:\text{Type}, L_2:(\text{Id} \times (A \rightarrow B \rightarrow (\text{Top List}))) \text{ List}, L:(\text{Top} \times \text{Id} \times \text{Top}) \text{ List}, tg:\text{Id}, a:A, b:B.$
 $\{\text{map}(\lambda x.2\text{of}(x);L)$
=
 $\text{concat}(\text{map}(\lambda tgf.\text{map}(\lambda x.\langle 1\text{of}(tgf), x \rangle;2\text{of}(tgf)(a,b));L_2))$
 $\in (\text{Id} \times \text{Top}) \text{ List}$
 $\Rightarrow \neg(tg \in \text{map}(\lambda p.1\text{of}(p);L_2))$
 $\Rightarrow \text{filter}(\lambda ms.1\text{of}(2\text{of}(ms)) = tg;L) = \text{nil} \in (\text{Top} \times \text{Id} \times \text{Top}) \text{ List}\}$