

star-append^{11,40}

star-append($T; P; Q$)(L)
 $\equiv_{\text{def}} \exists LL:T \text{ List List}$
 $\quad \exists L':T \text{ List. } (\text{!all}(LL; (T \text{ List}); X.(P(X))) \wedge (Q(L')) \wedge (L = \text{append}(\text{concat}(LL); L')))$

clarification:

star-append($T; P; Q$)(L)
 $\equiv_{\text{def}} \exists LL:T \text{ List List}$
 $\quad \exists L':T \text{ List}$
 $\quad (\text{!all}(LL; (T \text{ List}); X.(P(X))) \wedge (Q(L')) \wedge (L = \text{append}(\text{concat}(LL); L') \in (T \text{ List})))$