decidable-last-rel[0,22]

$\forall T$:Type, P:((T List)$\rightarrow T\rightarrow$Prop).
($\forall L$:T List, x:T. Dec($P(L,x)$))
$\Rightarrow$ ($\forall L$:T List. Dec($\exists L'$:T List, x:T. $L = (L' \mathbin{@} [x])$ & $P(L',x)$))

http://www.cs.cornell.edu/Info/Projects/NuPrl/FDLcontent/p0_286125_/p25_87092_{decidable-last-rel}.html